

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MONTANA  
GREAT FALLS DIVISION

TERRYL T. MATT,	)	Civil Action No. 15-cv-00028-BMM
	)	Civil Action No. 16-cv-00046-BMM
Plaintiff,	)	
	)	
v.	)	
	)	
Fort Belknap Indian Community,	)	
	)	
Defendant.	)	
	)	
TERRYL T. MATT,	)	CONSENT DECREE
	)	
Plaintiff,	)	
	)	
v.	)	
	)	
UNITED STATES OF AMERICA,	)	
	)	
Defendant.	)	

**I. Background**

1. Plaintiff, Terryl T. Matt, filed a Complaint (Appendix A) in this matter (15-cv-0028) pursuant to the Federal Tort Claims Act, 28 U.S.C. §1346(b) and §2671, *et seq.* The Complaint alleged that Defendant, United States, through the Bureau of Indian Affairs (BIA), carried out improper road building on a road

crossing Plaintiff's property on the Fort Belknap Indian Reservation, Montana, which is held in trust by the United States. Among other issues, Plaintiff complained that the road, commonly known as Dan Healy Road (also known as BIA Route 113 or Camp Creek Road), was built so that it obstructed and diverted a creek away from its natural riparian corridor and across the Plaintiff's land causing significant damage to her land.

2. On May 25, 2017, the Court ordered the Parties to mediation.

3. Ms. Matt and the United States agree, and this Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith, that settlement of this matter will avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

THEREFORE, with the consent of the Parties to this Decree, it is  
ORDERED, ADJUDGED, AND DECREED:

## **II. JURISDICTION AND VENUE**

4. This Court has jurisdiction over the subject matter of these actions pursuant to 28 U.S.C. §1346(b), 28 U.S.C. §2671, *et seq.*, 28 U.S.C. §2201 and 28 U.S.C. §1331. Venue lies in this District pursuant to 28 U.S.C. §1402(b) because the Plaintiff resides in the judicial district and the acts and omissions complained of occurred within this judicial district. The Plaintiff and the United States shall not challenge entry of this Consent Decree or this Court's jurisdiction to enter and to enforce this Consent Decree, or venue in this judicial district.

## **III. SCOPE, APPLICABILITY, AND PURPOSE**

5. This Consent Decree shall apply to, and be binding upon Defendant, United States of America, and Plaintiff, Terryl T. Matt.

6. The provisions of this Consent Decree shall apply to, and be binding upon, the Parties to this action, their officers, directors, agents, employees, successors and assigns, and any person, firm, or corporation acting in concert or participation with the Parties.

7. This Consent Decree in no way affects or relieves Plaintiff and Defendant of their responsibilities to comply with any applicable federal, state, tribal, or local law, or regulation.

8. A primary purpose of this Consent Decree is to enable the United

States to fulfill its role as Trustee for Plaintiff; to remedy the damage to the lands and natural resources identified in this Consent Decree and attached appendices; and to resolve Plaintiff's dispute with Defendant that is the basis of this civil action.

#### **IV. DEFINITIONS**

9. "BIA" shall mean the Bureau of Indian Affairs, an agency of the United States Department of the Interior, and any of its successor departments or agencies.

10. "Biota Plan" shall mean the "Matt Property Reclamation Plan Cost Estimate Report, Blaine County, Montana" prepared by Biota Research and Consulting, Inc., of Jackson, Wyoming, dated September 30, 2015, Appendix B, attached hereto and incorporated herein by reference.

11. "Consent Decree" shall mean this Consent Decree and all appendices attached hereto.

12. "Creek" shall mean White Horse Canyon Creek on the Fort Belknap Indian Reservation, Montana.

13. "Dan Healy Road" (also known as BIA Route 113 or Camp Creek Road) shall mean the road that begins at BIA Route 112 on the Fort Belknap Indian Reservation, Montana, and continues south to cross a creek known as

Lodgepole Creek toward the mountains along the creek known as White Horse Canyon Creek across allotments 752-B, 752-C, and 751-D, among others.

14. “Day” shall mean a calendar day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.

15. “Defendant” shall mean the United States of America.

16. “Delay” shall mean an event or series of events arising from required licensing and permitting processes that are beyond the control of the Defendant, including its employees, agents, consultants, and contractors, which could not be overcome by due diligence and which delays or prevents the performance of an action required by this Consent Decree and appendices attached hereto within the specified time period.

17. “Force Majeure” shall mean any event or series of related events arising from causes beyond the control of Defendant, including its employees, agents, consultants and contractors, which could not be overcome by due diligence and which delays or prevents the performance of an action required by this Consent Decree and appendices attached hereto within the specified time period.

18. “Month” shall mean a calendar month.

19. “NEPA” shall mean National Environmental Policy Act. 42 U.S.C. §4321, *et seq.*
20. “Paragraph” shall mean a portion of this Consent Decree identified by an Arabic numeral or a letter.
21. “Parties” shall mean Terryl T. Matt and the United States, including but not limited to the BIA, its officers, directors, agents, employees, successors, and assignees and any person, firm, or corporation acting in concert or participation with the United States.
22. “Plaintiff” shall mean Terryl T. Matt, an enrolled member of the Assiniboine Tribe of the Fort Belknap Indian Reservation, Montana.
23. “Reclamation, Restoration, or Rehabilitation” shall mean the manipulation of the physical, chemical, or biological characteristics of the Restoration Site for the purpose of establishing ecologically stable and functioning conditions at the Site.
24. “Restoration Site” or “Site” shall mean the impacted area illustrated in the Biota Plan (Appendix B, Exhibit 2) and the head cut that has migrated upstream as illustrated in the Biota Plan (Appendix B, Exhibit 2 and Addendum 1).
25. “Section” shall mean a portion of this Consent Decree identified by a Roman numeral.

26. “United States” shall mean the United States of America, including its departments, agencies, and instrumentalities.

27. “Work Plan” shall mean the document detailing the completion of tasks required for restoration pursuant to this Consent Decree, in accordance with the principles of 33 C.F.R. 332.4(c)(7).

## **V. RESTORATION OF SITE AND WHITE HORSE CANYON CREEK**

28. Defendant shall perform restoration activities in accordance with the scientific principles contained in the following publications:

A. United States Department of Agriculture, Natural Resources Conservation Service, National Engineering Handbook Part 654, Stream Restoration Design, FISRWG, (10/1998).

B. Federal Interagency Stream Restoration Working Group, Stream Corridor Restoration: Principles, Processes, and Practices (15 federal agencies of the U.S. Government).

C. Rosgen, Dave, Watershed Assessment of River Stability and Sediment Supply (WARSSS), Wildland Hydrology, Fort Collins, Colorado (2006).

29. Defendant shall perform restoration activities in accordance with the principles undergirding applicable laws and regulations that protect the

environment including, but not limited to, those of 42 U.S.C. §4321, *et seq.*, 40 C.F.R. 1500, *et seq.*, 33 U.S.C. §1251, *et seq.*, and the laws, regulations, guidelines, and requirements of the U.S. Army Corps of Engineers (33 C.F.R. Chapter II; 40 C.F.R. 230; United States Army Corps of Engineers 2017 Nationwide Permits, General Conditions, District Engineer's Decision, Further Information and Decisions (82 FR 1860, January 6, 2017); and those of the U.S. Army Corps of Engineers and Environmental Protection Agency Compensatory Mitigation Regulations and Guidelines (33 C.F.R. 332, *et seq.*)).

30. Defendant shall perform and achieve restoration activities at the Restoration Site under the terms, conditions, and objectives set forth in the Biota Restoration Plan in Appendix B, appended hereto and incorporated by reference, with the exception that restoration to Dan Healy Road will occur in its current location in accordance with the applicable standards found in the Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT 400), American Association of Highway and Transportation Officials (AASHTO), 2001, for existing, unpaved roads in rural areas. Dan Healy Road will not be relocated as indicated in the Biota Plan, Appendix B, pp. 8, 14, 15.

31. Except as otherwise provided in this Consent Decree or ordered by the Court, Defendant shall complete full restoration within eighteen (18) months from



the date of entry of this Consent Decree.

32. Defendant shall timely provide Plaintiff and this Court a detailed Work Plan for the completion of tasks required for restoration pursuant to this Consent Decree, in accordance with the principles of 33 C.F.R. 332.4(c)(7).

33. Defendant shall timely secure funding or provide financial assurance to Plaintiff and this Court for adequate staff and materials to complete obligations under this Consent Decree, in accordance with the principles of 33 C.F.R. 332.3(n).

34. Defendant shall timely obtain all federal, state, tribal, and local permits necessary for performing any compliance obligation under this Consent Decree, including but not limited to any permits required pursuant to 33 U.S.C. §1251, *et seq.*

35. Defendant shall timely develop and implement objective and verifiable performance measures and reporting mechanisms for the duration of restoration and the monitoring period in accordance with the principles of 33 C.F.R. 332.5.

36. Pursuant to this Consent Decree, the publications, laws, guidelines, and regulations referenced herein, and the Biota Plan, Appendix B, Defendant shall, without limitation:

A. Rehabilitate agricultural lands at the Restoration Site, including but not limited to removal, collection, and stockpiling of deposited material such as rocks and sediment, reclamation of topsoil, treatment and removal of weeds, and re-establishment of vegetative communities in pasture lands.

B. Fill incised degraded channel of the Creek to stable topographic conditions through the importation of topsoil, re-seeding, and re-establishment of vegetative communities characteristic of the area.

C. Restore and stabilize incised upstream impacted reaches of the Creek, including head cuts and nick points, and deliver the watercourse to the natural downstream historic alignment.

D. Restore and stabilize Dan Healy Road in its current location in accordance with the recommendations of the Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT 400), American Association of Highway and Transportation Officials (AASHTO), 2001, for existing, unpaved roads in rural areas.

37. Defendant shall accept from the Fort Belknap Indian Community materials provided in-kind for the purpose of restoration, including but not limited to rip-rap and gravel.

38. Defendant shall develop and implement a post-restoration monitoring

plan to ensure that the project meets performance standards for a period of no less than five (5) years in accordance with the principles of 33 C.F.R. 332.6.

39. Upon completion of restoration of the Site as set forth in the detailed Work Plan developed by the Defendant and approved by the Court, Defendant shall not conduct work, construction, or maintenance or similar activities that disturb soils, vegetation, or water resources in any manner at or around any area of restoration except as in accordance with the terms of this Consent Decree.

40. Until termination of this Consent Decree, and with timely written notice to Plaintiff, Defendant and its authorized agents shall have authority at all reasonable times to enter the Restoration Site to:

- A. Conduct activities required by this Consent Decree.
- B. Inspect, evaluate, and monitor activities required by this Consent Decree.
- C. Obtain samples or take photographs or video specifically related to the requirements of this Consent Decree.

41. Plaintiff shall not interfere with or hinder Defendant's performance of the obligations described in this Consent Decree.

## **VI. NOTICES AND OTHER SUBMISSIONS**

42. For the first two (2) years following entry of this Consent Decree,

within five (5) days of May 30 and November 30 of each year, Defendant shall provide to the Court a written status report detailing its progress toward completing all tasks required by this Consent Decree and the Work Plan. From the third year following entry of the Consent Decree until the Consent Decree is terminated, on an annual basis within five (5) days of November 30, Defendant shall provide to the Court a written status report detailing its progress toward completing all tasks or monitoring activities required by this Consent Decree and the Work Plan. Defendant shall timely send a copy of each status report to Plaintiff via certified mail to the address specified in Section X of this Consent Decree.

## **VII. RETENTION OF RECORDS**

43. During the term of this Consent Decree and until three (3) years after the termination of this Consent Decree, Defendant shall preserve and retain the records, documents, and information now in its possession or control or which come into its possession or control that relate in any manner to the performance of the tasks in this Consent Decree (including all Appendices), unless any retention policy requires a greater retention period, and Defendant shall allow inspection of the same by Plaintiff within sixty (60) days after receipt of written request to do so.

44. Records, documents, and information to be retained shall include, without limitation:

- A. Final restoration plans submitted and supporting documentation.
- B. Status reports submitted pursuant to Paragraph 42.
- C. All permits and supporting documentation.
- D. Subject to Paragraph 46, correspondence, including in electronic format, between and among Defendant, Plaintiff, and the Fort Belknap Indian Community related to activities required by this Consent Decree.
- E. Records regarding payments or expenditures related to the performance of the tasks required by this Consent Decree.
- F. Documents related to the transfer, rental, or leasing of any land included within, or adjacent to, the Restoration Site, including payment documentation associated therewith.
- G. Requests or motions for dispute resolution.
- H. Force majeure or Delay notifications and related correspondence between or among Defendant, Plaintiff, and the Fort Belknap Indian Community.
- I. Restoration monitoring records.
- J. Requests for termination and related filings.

45. Defendant shall instruct its contractors and agents to preserve all non-identical copies of documents, records, and information identified in Paragraph 44 relating to the performance of the tasks in this Consent Decree (including Appendices) for a period through three (3) years following the termination of this Consent Decree.

46. At the conclusion of the document retention period, Defendant shall notify the Plaintiff pursuant to the Notification procedures in Section X at least ninety (90) days prior to the destruction of any records or documents identified in Paragraph 44, and, upon written request by Plaintiff, Defendant shall make available to the Plaintiff any non-privileged, non-identical records or documents in Defendant's, its contractors' or its agents' possession, custody or control, as applicable. If Plaintiff does not submit a written request for delivery of such documents or records within the 90-day period, then the records or documents may be destroyed. The Defendant may assert that certain documents, records, and other information are privileged under the attorney-client privilege or any other privilege recognized by the federal law. However, no document created or generated pursuant to the requirements of this Consent Decree or correspondence between the Parties or correspondence with the Fort Belknap Indian Community created or generated pursuant to the requirements of this Consent Decree shall be withheld on

the grounds that it is privileged.

### **VIII. DISPUTE RESOLUTION**

47. Unless otherwise expressly provided for in this Consent Decree, or agreed to by the Parties in writing, any dispute that cannot be resolved informally, shall be referred to the Court for resolution pursuant to this Court's continuing jurisdiction to enforce the terms and conditions of this Consent Decree. The Parties agree that such disputes may be referred to the Magistrate Judge for mediation.

### **IX. FORCE MAJEURE AND OTHER DELAYS**

48. If Defendant believes that a Force Majeure event or a Delay caused by a licensing or permitting process has affected or will affect its ability to perform any action required under this Consent Decree, Defendant shall notify Plaintiff in writing, by certified mail, with no undue delay but no later than thirty (30) calendar days after the Force Majeure event or Delay begins, at the address listed in Section X. Such notice shall include, but is not limited to, a discussion of the following:

- A. What action has been affected;
- B. The specific cause(s) of the Force Majeure event or Delay;
- C. The length or estimated duration of the Force Majeure event or

Delay;

D. Any measures taken or planned by Defendant to prevent or minimize the effect of the Force Majeure event or Delay; and

E. The schedule for the implementation of such measures.

49. Defendant and Plaintiff shall negotiate in good faith to determine when to begin or resume the activities that have been affected by a Force Majeure event or Delay.

50. If the Parties are unable to agree whether the conditions constitute a Force Majeur event or Delay under this Section IX, or when to begin or resume the activities that have been affected by Force Majeur event or a Delay, under this Section IX, than Defendant or Plaintiff may seek a resolution of the dispute under the procedures in Section VIII of this Consent Decree.

## **X. NOTICE**

51. Unless otherwise specified herein, whenever notifications, submissions or communications are required by this Consent Decree, they shall be made in writing and addressed to each of the following persons and addresses:

A. To Defendant, United States:

i. U.S. Attorney For the District of Montana  
901 Front Street, Suite 1100  
Helena, MT 59626



ii. W. Adam Duerk  
Assistant United States Attorney  
U.S. Attorney's Office for the District of Montana  
105 E. Pine Street, 2nd Floor  
Missoula, MT 59802  
Adam.Duerk@usdoj.gov

B. To Plaintiff, Terryl T. Matt

Terryl T. Matt  
310 E. Main Street  
Cut Bank, MT 59427  
terrylm@mattlawoffice.com

52. A Party may change the mailing designation in this Section X by providing written notice of the address change by certified mail to the other Party, which address change will be effective seven (7) days after the notice is sent.

## **XI. CONTINUING JURISDICTION OF THE COURT**

53. The Court shall retain jurisdiction over this action for the purpose of enforcing the provisions of this Consent Decree and appendices attached hereto, including but not limited to full and complete restoration, and post-restoration monitoring, and until the Consent Decree has been terminated pursuant to Section XIII or otherwise by this Court.

## **XII. MODIFICATION**

54. Upon its entry by the Court, this Consent Decree shall have the force and effect of a final order. Any material modification of this Consent Decree,

except for modification of the notification addresses in Section X, shall be in writing, and shall not take effect unless signed by Plaintiff and Defendant and approved by the Court; provided, however, that the Work Plan for the completion of tasks may be modified without Court approval by written agreement of Plaintiff and Defendant.

### **XIII. TERMINATION**

55. This Consent Decree may be terminated as follows:

A. Plaintiff and Defendant may at any time make a joint motion to the Court for termination of this Consent Decree or any portion of it;

B. After Defendant has fulfilled all of the obligations of this Consent Decree and appendices attached hereto:

i. Defendant may serve a Request for Termination on Plaintiff. The Request for Termination shall state that Defendant has satisfied all requirements of this Consent Decree. The Request for Termination shall also include any additional supporting documentation not already in the Court record or already provided to Plaintiff sufficient to demonstrate that Defendant has satisfied the Consent Decree. Following service of Defendant's Request for Termination, the Parties may confer informally concerning the

Request.

ii. If Plaintiff agrees that the Consent Decree may be terminated, or if Plaintiff fails to respond within sixty (60) days after service of Defendant's Request for Termination on Plaintiff, Defendant shall submit, for the Court's approval, a Notice to Terminate the Consent Decree.

iii. If, within sixty (60) days after service of Defendant's Request for Termination on Plaintiff, Plaintiff notifies Defendant in writing that Plaintiff does not agree that the Consent Decree may be terminated, then Defendant may submit a motion to the Court asking for termination of the Consent Decree without invoking Dispute Resolution under Section VIII of this Consent Decree. Defendant shall demonstrate to the Court's satisfaction that it has satisfied all the requirements of this Consent Decree.

#### **XIV. INTEGRATION OF APPENDICES**

56. Appendices A and B attached hereto, are incorporated into this Consent Decree.

## **XV. EFFECTIVE DATE**

57. The effective date of this Consent Decree shall be the date upon which it is entered by the Court.

## **XVI. SIGNATORIES / SERVICE**

58. Plaintiff, Terryl T. Matt, and undersigned counsel for the Defendant, United States, each certifies that they are authorized to enter into the terms of this Consent Decree and to execute and bind legally such Party to this document.

59. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis.

## **XVII. ORDER**

60. IT IS HEREBY ORDERED that this Consent Decree is entered this 16th day of October, 2017.

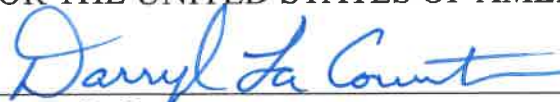


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Brian Morris  
UNITED STATES DISTRICT JUDGE

Defendant, United States, Bureau of Indian Affairs, hereby consents to the entry of the Consent Decree in the matter of *Matt v. United States* (15-cv-28).

FOR THE UNITED STATES OF AMERICA



Darryl LaCounte


Rocky Mountain Regional Director

Bureau of Indian Affairs

2021 4th Ave. N.

Billings, MT 59101

Plaintiff, Terryl T. Matt, hereby consents to the entry of the Consent Decree  
in the matter of *Matt v. United States* (15-cv-28).



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Terryl T. Matt  
310 E. Main Street  
Cut Bank, MT 59427

## APPENDIX A

Mandi A. Vuinovich (Mt. Bar No. 13908) (mj@bcrattorneys.com)  
Baldwin, Crocker & Rudd, P.C.  
P.O. Box 1229  
Lander, WY 82520-1229  
Tel: (307) 332-3385  
Fax: (307) 332-2507

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MONTANA  
GREAT FALLS DIVISION

TERRYL T. MATT,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No. _____
	)	
UNITED STATES OF AMERICA,	)	
	)	
Defendant.	)	

**COMPLAINT**

COMES NOW Plaintiff, Ms. Terryl T. Matt, by and through her counsel, and respectfully submits this complaint as follows:

**Introduction**

1. This action is based upon the Federal Tort Claims Act, 28 U.S.C. §1346(b) and §2671, *et. seq.*
2. This case arises on the Fort Belknap Indian Reservation (“Reservation”), south of the Town of Lodgepole, Montana, near the mouth of Whitehorse Canyon. Plaintiff owns a ranch on the Reservation, which has been in her family for generations. The U.S. government, acting by and through the U.S. Department of the Interior (“DOI”), U. S. Bureau of Indian Affairs (“BIA”), and in concert with Fort Belknap tribal officials, built a road across the Plaintiff’s ranch



property without her authorization or permission. The road was constructed without regard for basic engineering or environmental considerations and without regard for laws and regulations that serve to protect the environment. Among other issues, the road was constructed so that it obstructs and diverts a creek away from its natural riparian corridor and across the Plaintiff's ranch. The diverted creek has and continues to cause extensive damage to the Plaintiff's ranch, including the riparian area, by carving a canyon through the land and causing significant and ongoing erosion. Plaintiff seeks money damages to fund restoration to her property and compensate her for damage caused by road building and maintenance activities.

### **Parties**

3. Plaintiff, Terryl T. Matt, is an enrolled member of the Assiniboine Tribe of the Fort Belknap Reservation. Ms. Matt was, and remains, a resident of the State of Montana at all times relevant to the facts alleged in this Complaint.

4. The United States of America is a sovereign government that has consented to be sued for civil liability pursuant to 28 U.S.C. §2871, *et. seq.*

5. The BIA is the agency of the Defendant, the United States of America, under the direct jurisdiction of the DOI, acting on behalf of the Defendant which has a federal trust responsibility toward Tribes and tribal members, including the Plaintiff, Terryl Matt. Federal officials are charged with administering the federal trust responsibility through the BIA, among other agencies.

6. Federal employees who acted on behalf of the Defendant include, but are not limited to:

A. Mr. Ed Parisian, at all times relevant herein before his retirement, was an

employee with the BIA pursuant to 28 U.S.C. §2671, working as the Regional Director for the BIA Rocky Mountain Regional Office in Billings, Montana. At all times material herein, Ed Parisian was acting within the scope of his employment with the U.S. government.

B. Mr. Cliff Hall, at all times relevant herein, was an employee with the BIA pursuant to 28 U.S.C. §2671, working as the BIA Superintendent of the Fort Belknap Agency in Harlem, Montana. At all times material herein, Cliff Hall was acting within the scope of his employment with the U.S. government.

C. Mr. Mike Tolden, at all times relevant herein, was an employee with the BIA pursuant to 28 U.S.C. §2671, working as the BIA Roads Manager on the Fort Belknap Indian Reservation out of the BIA office in Billings, Montana. At all times material herein, Mike Tolden was acting within the scope of his employment with the U.S. government.

D. Plaintiff does not know the true identities of additional federal employees who were acting within the scope of their employment when they performed road building and maintenance activities that damaged her property. These unknown government employees or agents are named in their fictitious names, John Doe 1 and John Doe 2.

### **Jurisdiction and Venue**

7. This United States District Court has exclusive jurisdiction over this action pursuant to 28 U.S.C. §1346(b) because Plaintiff is bringing a claim against the United States for money damages for injury to property, and loss of property, caused by negligent or wrongful acts

or omissions of employees of the government while acting within the scope of his/her office or employment, under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law.

8. Venue is proper in the U.S. District Court of Montana pursuant to 28 U.S.C. §1402(b) because the Plaintiff resides in the judicial district and the acts and omissions complained of occurred within this judicial district.

9. Pursuant to 28 U.S.C. §2680(a), this claim is not based upon the exercise or performance or failure to exercise or perform a discretionary function or duty on the part of the Defendant or its employees.

10. Procedural prerequisites to filing this action have been properly satisfied, including compliance with 28 U.S.C. §2675(a).

11. Plaintiff filed a Notice of Claim in the proper form based on the facts set forth in this Complaint. The Notice of Claim was filed on May 22, 2014, with the appropriate federal agency, the BIA.

12. The BIA denied Plaintiff's claim on November 21, 2014.

13. The amount in controversy exceeds, exclusive of interests and costs, the sum of Seventy-Five Thousand Dollars and no/100 (\$75,000.00). Consistent with the amount presented to the federal agency, the amount of the claim is Five Million Three Hundred Forty-Nine Thousand Seven Hundred Forty-Four and no/100 dollars (\$5,349,744.00) or whatever amount is deemed necessary and appropriate to pay for removal of the unauthorized road, restoration of the ecological damage caused by the road, restoration of agricultural lands damaged by the road, restoration of the diverted water course, the cost of replacement of topsoil and other earthen

materials lost as a result of construction or erosion, and all costs and damages associated with the tortuous conduct in this case, all of which is ongoing.

**Facts Common to All Causes of Action**

14. Plaintiff owns a ranch on the Fort Belknap Indian Reservation, south of the Town of Lodgepole, Montana, near the mouth of Whitehorse Canyon. Ms. Matt's ranch was, and continues to be, damaged by the Defendant, United States, and is the subject of the Complaint.

15. At all times mentioned in this Complaint, Ms. Matt has a 1/1 interest in Allotment 751-C; a 1/1 interest in Allotment 751-E; a 1/1 interest in Allotment 752-B; and a 1/2 interest in Allotment 752-C. Upon information and belief, the other 1/2 interest in Allotment 752-C is owned by the Bear family and the resident Tribe.

16. Legal descriptions of Ms. Matt's Fort Belknap allotments, are as follows:

- A. 751C (SW1/2 SE1/4, Sec. 20, T.26 N, R. 25 E & NW1/2 NE1/4, Sec. 29, T.26 N, R. 25E.);
- B. 751E (NE1/4 NE1/4, Sec. 29, T.26 N, R. 25 E.);
- C. 752B (N1/2 NE1/4, N1/2 S1/2 NE1/4, Sec. 20, T. 26 N., R. 25 E.); and
- D. 752C (N1/2 SE1/4, S1/2 S1/2 NE1/4, Sec. 20, T. 26 N., R. 25E.).

17. The ranch property was previously owned by Ms. Matt's father and mother, Daniel and Annabel Healy, from 1970 to 2010. Ms. Matt took possession of the ranch in late 2010 after her father passed away.

18. Plaintiff is employed, and regularly resides, in Cut Bank, Montana. Cut Bank is approximately 200 miles from Ms. Matt's ranch property. For this reason, she is often away from her property on the Reservation.

19. Prior to his passing, Daniel Healy may have granted "permission" to community

members to cross the family's ranch for the purpose of gathering firewood in a timbered area beyond the property.

20. On various occasions, the BIA has asserted the right to cross the Plaintiff's land beyond the scope and purpose of any possible limited permission or right-of-way. None of these assertions are clear to the Plaintiff.

21. The Plaintiff is informed, and on the basis of that information alleges, that sometime after her father passed away, Defendant performed maintenance to the road on Plaintiff's property in an attempt to improve the road.

22. The road work was carried out without the Plaintiff's knowledge and without the Plaintiff's authorization or permission.

23. The Plaintiff is informed, and on the basis of that information alleges, that the road is designated by the BIA as Route 113, which is located in or near Sections 17 and 20, Township 26 North, Range 25 East, in Blaine County, Montana, within the Fort Belknap Indian Reservation.

24. Defendant maintained BIA Route 113 in a way that obstructed and diverted a creek flow onto the Plaintiff's property.

25. The road work on BIA Route 113 was performed without regard for basic engineering or environmental considerations that are typically related to road design and construction or the moving of a waterway. The road was constructed without regard for the laws and regulations that serve to protect the environment.

26. The Plaintiff is informed, and on the basis of that information alleges, that the road work on BIA Route 113 was performed to create convenient access for her neighbors,

Theodore Bell and Kathy Wing, to come and go from their home.

27. Kathy Wing obtained 40 acres by a questionable gift deed, which is where she has a home on a parcel of land that is adjacent to Ms. Matt's ranch property.

28. Subsequent to original work and maintenance on BIA Route 113, on or about June, 2011, the Fort Belknap area experienced a high-water event caused by significant rainfall and spring runoff. During that time, the creek on Plaintiff's property had very high water flows.

29. The Plaintiff is informed, and on the basis of that information alleges, that Defendant's road work on BIA Route 113 prior to the high-water event caused the waterway to jump out of its natural channel and to cross Ms. Matt's pasture lands. It is further alleged that the creek cut a canyon through Ms. Matt's pastures and rendered impassable BIA Route 113. This caused significant and ongoing damage to Plaintiff's land, which has negatively affected the overall value of her property.

30. In response to the high-water event of June, 2011, Defendant brought heavy equipment onto Plaintiff's land and bulldozed a new temporary road across her property. This second, temporary, road is located up-slope, and to the south of BIA Route 113, which was impassable due to erosion caused by prior obstruction of the creek. Construction of the temporary road was performed without Ms. Matt's knowledge or authorization. It is further alleged that construction of the temporary road was performed without regard for basic engineering or environmental considerations that are typically related to road design and construction.

31. On or about August, 2011, and again without Plaintiff's permission, Defendant set about rebuilding BIA Route 113 by adding to it large volumes of road base and material fill,

including gravel.

32. On or about September, 2013, and again without Plaintiff's permission, Defendant performed construction and maintenance on BIA Route 113 on Ms. Matt's property.

33. The Plaintiff is informed, and on the basis of that information alleges, that additional construction and maintenance to BIA Route 113 was also performed without regard for basic engineering or environmental considerations that are typically related to road design and construction or the moving of a waterway. In particular, these activities were performed without regard for problems caused by prior obstruction of the creek.

34. As a result of the Defendant's construction and maintenance activities on BIA Route 113, that road now acts as a coffer dam, which traps the creek on the uphill side of the road and prevents the creek from entering its natural riparian corridor. This obstruction causes significant and ongoing damage to Ms. Matt's property, including soil erosion, environmental degradation, and the invasion of noxious weeds.

35. It is alleged that Defendant did not seek or obtain permission from the Plaintiff to enter onto her land, or perform the projects described herein, which included obstructing a water way and building roads, among other activities.

36. Upon information and belief, Plaintiff alleges that employees and agents of the BIA collaborated with officials of the Fort Belknap tribal government in the process of building and maintaining the roads described herein, among other activities that damaged her land.

37. Plaintiff is informed and believes, and on that basis alleges, that BIA Route 113, and the temporary road, were built and maintained on her land in a manner that is negligent, a trespass, and a nuisance to her.

38. The Defendant owes a duty of care to the Plaintiff as a tribal member. BIA employees, Ed Parisian, Cliff Hall, Mike Tolden, John Doe 1 and John Doe 2, negligently breached that duty of care while acting within the scope of their employment with the U.S. government.

39. Ms. Matt is informed and believes, and on that basis alleges, that the Defendant's conduct is the proximate cause of previous and ongoing damage to her land. This damage prevents the Plaintiff from accessing large portions of her ranch or leasing her land for grazing or agricultural purposes.

40. Defendant continues to trespass on Ms. Matt's land to use BIA Route 113 despite repeated requests by her that the U.S. government, and its employees and agents, refrain from entering onto, or altering, her land. The ongoing trespass poses a threat to the good and marketable title to Ms. Matt's land.

41. Ms. Matt is informed and believes, and on that basis alleges, that the serious and continual damage to her land will take a number of years to repair and that damage will render her property unusable for several years to come, resulting in a loss of income from hay fields and grazing leases.

42. Included as Exhibit 1 for the Plaintiff is a map which demonstrates the affected portion of Plaintiff's ranch property and extent of damage as of May, 2014.

**FIRST CLAIM FOR RELIEF  
(Negligence)**

43. The Plaintiff hereby realleges each of the allegations set forth in the preceding



paragraphs, and by this reference incorporates each such allegation herein as if set forth in full.

44. At all times relevant to this Complaint, Defendant, its employees, and agents owed a duty to Plaintiff, in light of all relevant circumstances, to exercise reasonable and due care.

45. Defendant, its employees, and agents, breached this duty of reasonable care by directing that, or allowing for, heavy equipment to be brought onto Plaintiff's land for the purposes of performing road work and moving a creek, among other activities. Defendant further breached its duty of reasonable care by allowing persons to enter into Plaintiff's land beyond the scope and purpose of any limited permission that may have been granted to community members.

46. Defendant's breach of the duty of reasonable care was the actual and proximate cause of damage to Ms. Matt's property.

47. As a result of the Defendant's breach of its duty of care, Plaintiff has been harmed.

48. Defendant, its employees, and agents have a duty to protect tribal members and their lands.

49. Defendant breached its duty to protect Plaintiff as a tribal member, and her land, by directing that, or allowing for, heavy equipment to be brought onto the Plaintiff's property for the purposes of performing road work and moving a creek, among other activities. Defendant further breached its duty to protect Plaintiff as a tribal member, and her land, by allowing persons to enter into Plaintiff's land beyond the scope and purpose of any limited permission that

may have been granted to community members.

50. As a result of the Defendant's breach of its duty to protect tribal members and their lands, Ms. Matt has been harmed.

51. As a direct and proximate result of the acts and omissions of Defendant, its employees, and agents acting within the scope of their employment, Plaintiff's land has been, and continues to be, damaged.

52. Damages for unauthorized use of the Plaintiff's property will be proven at trial.

**SECOND CLAIM FOR RELIEF  
(Trespass)**

53. Plaintiff hereby realleges each of the allegations set forth in the preceding paragraphs, and by this reference incorporates each such allegation herein as if set forth in full.

54. The Defendant, its employees, and agents, have entered onto Plaintiff's land, which has a title held in trust by the United States government, without Plaintiff's consent or authorization.

55. The actions of the Defendant, its agents, and employees, has caused a road to be built and a creek bed to change course, among other activities, all which constitutes a trespass that continues to cause significant and ongoing damage to Plaintiff's land.

56. The Defendant, its employees, and agents, entered into the Plaintiff's land beyond the scope and purpose of any limited permission that may have been granted to community members.

57. The Defendant, its employees, and agents, knowingly and willfully continue to

trespass on Plaintiff's land despite repeated requests from Ms. Matt for the Defendant, its employees, and agents to stop the trespass.

58. Damages for the trespass will be proven at trial.

**THIRD CLAIM FOR RELIEF  
(Nuisance)**

59. Plaintiff hereby realleges each of the allegations set forth in the preceding paragraphs, and by this reference incorporates each such allegation herein as if set forth in full.

60. The Defendant, its employees, and agents, have entered onto Plaintiff's land, which has a title held in trust by the U.S. government, without her consent or authorization.

61. The actions of the Defendant, its employees, and agents, caused a road to be built and a creek bed to change course, among other activities, on Plaintiff's land, all which continue to cause substantial and unreasonable interference with the land, including pasture lands and riparian areas.

62. The conduct of the Defendant, its employees, and agents related to the activities described herein are offensive, inconvenient, and annoying to the Plaintiff.

63. The conduct of the Defendant, its employees, and agents, has directly interfered with Plaintiff's use and enjoyment of her land for several years with substantial damage resulting from activities on or about September, 2013.

64. The conduct of the Defendants, its employees, and agents, is severe and unreasonable and outweighs any potential utility gained by the Defendants from their conduct.

65. Damages for nuisance will be proven at trial.

**Prayer for Relief**

WHEREFORE, Plaintiff respectfully requests that this Court:

- A. Enter judgment in favor of Plaintiff against Defendant.
- B. Award Plaintiff all damages that are fair and just to fully restore property damage and riparian area.
- C. Award Plaintiff all damages in the amount of five million three hundred forty-nine thousand seven hundred forty four and no/100 dollars (\$5,349,744.00) or whatever amount is deemed necessary and appropriate to pay for removal of the unauthorized road, restoration of the ecological damage caused by the road, restoration of agricultural lands damaged by the road, restoration of the diverted water course, the cost of replacement of topsoil and other earthen materials lost as a result of construction or erosion, and all costs and damages associated with the tortuous conduct in this case, all of which is ongoing.
- D. Award Plaintiff the costs of the lawsuit and attorneys fees; and any other and further relief be provided that the Court considers proper.

Respectfully submitted this 20<sup>th</sup> day of March, 2015.

By: \_\_\_\_\_/s/  
Mandi A. Vuinovich  
Baldwin, Crocker & Rudd, P.C.  
P.O. Box 1229  
Lander, WY 82520-1229  
(307) 332-3385  
ATTORNEY FOR PLAINTIFF TERRY T. MATT





Identifying names added by Baldwin, Crocker and Rudd, P.C., attorneys for Plaintiff

**EXHIBIT**

1

**LEGEND**

-  Impacted Agricultural Field  
7.8 acres
-  Diverted Whitehorse Canyon  
Creek/Road Impacts 3.8 acres

Aerial photograph depicting site characteristics  
and impacts associated with the diverted  
Whitehorse Canyon Creek, Terryl Matt property,  
Blaine County, Montana

May 15, 2014

Approximate Scale: 1 inch = 300 feet  
2013 NAIP Aerial Photography



PO Box 8578, 140 E Broadway, Suite 23, Jackson, WY 83002



JS 44 (Rev. 12/12)

**CIVIL COVER SHEET**

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)

**I. (a) PLAINTIFFS**

Terry T. Matt

**DEFENDANTS**

United States of America

(b) County of Residence of First Listed Plaintiff Blaine  
(EXCEPT IN U.S. PLAINTIFF CASES)

County of Residence of First Listed Defendant Blaine  
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE TRACT OF LAND INVOLVED.

(c) Attorneys (Firm Name, Address, and Telephone Number)  
Mandi A. Vuinovich; Baldwin, Crocker, & Rudd, P.C.  
P.O. Box 1229, Lander, WY, 82520  
(307) 332 - 3385

Attorneys (If Known)  
N/A

**II. BASIS OF JURISDICTION** (Place an "X" in One Box Only)

- ☐ 1 U.S. Government Plaintiff
- ☐ 3 Federal Question (U.S. Government Not a Party)
- ☒ 2 U.S. Government Defendant
- ☐ 4 Diversity (Indicate Citizenship of Parties in Item III)

**III. CITIZENSHIP OF PRINCIPAL PARTIES** (Place an "X" in One Box for Plaintiff and One Box for Defendant)

- |   | PTF                        | DEF                        |   | PTF                        | DEF                        |
|---|----------------------------|----------------------------|---|----------------------------|----------------------------|
| Citizen of This State                   | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 | Incorporated or Principal Place of Business In This State     | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |
| Citizen of Another State                | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 | Incorporated and Principal Place of Business In Another State | <input type="checkbox"/> 5 | <input type="checkbox"/> 5 |
| Citizen or Subject of a Foreign Country | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 | Foreign Nation  | <input type="checkbox"/> 6 | <input type="checkbox"/> 6 |

**IV. NATURE OF SUIT** (Place an "X" in One Box Only)

CONTRACT	TORTS	FORFEITURE/PENALTY	BANKRUPTCY	OTHER STATUTES	
<input type="checkbox"/> 110 Insurance <input type="checkbox"/> 120 Marine <input type="checkbox"/> 130 Miller Act <input type="checkbox"/> 140 Negotiable Instrument <input type="checkbox"/> 150 Recovery of Overpayment & Enforcement of Judgment <input type="checkbox"/> 151 Medicare Act <input type="checkbox"/> 152 Recovery of Defaulted Student Loans (Excludes Veterans) <input type="checkbox"/> 153 Recovery of Overpayment of Veteran's Benefits <input type="checkbox"/> 160 Stockholders' Suits <input type="checkbox"/> 190 Other Contract <input type="checkbox"/> 195 Contract Product Liability <input type="checkbox"/> 196 Franchise	<b>PERSONAL INJURY</b> <input type="checkbox"/> 310 Airplane <input type="checkbox"/> 315 Airplane Product Liability <input type="checkbox"/> 320 Assault, Libel & Slander <input type="checkbox"/> 330 Federal Employers' Liability <input type="checkbox"/> 340 Marine <input type="checkbox"/> 345 Marine Product Liability <input type="checkbox"/> 350 Motor Vehicle <input type="checkbox"/> 355 Motor Vehicle Product Liability <input type="checkbox"/> 360 Other Personal Injury <input type="checkbox"/> 362 Personal Injury - Medical Malpractice	<b>PERSONAL INJURY -</b> <input type="checkbox"/> 365 Personal Injury - Product Liability <input type="checkbox"/> 367 Health Care/Pharmaceutical Personal Injury Product Liability <input type="checkbox"/> 368 Asbestos Personal Injury Product Liability <b>PERSONAL PROPERTY</b> <input type="checkbox"/> 370 Other Fraud <input type="checkbox"/> 371 Truth in Lending <input type="checkbox"/> 380 Other Personal Property Damage <input type="checkbox"/> 385 Property Damage Product Liability	<input type="checkbox"/> 625 Drug Related Seizure of Property 21 USC 881 <input type="checkbox"/> 690 Other <b>LABOR</b> <input type="checkbox"/> 710 Fair Labor Standards Act <input type="checkbox"/> 720 Labor/Management Relations <input type="checkbox"/> 740 Railway Labor Act <input type="checkbox"/> 751 Family and Medical Leave Act <input type="checkbox"/> 790 Other Labor Litigation <input type="checkbox"/> 791 Employee Retirement Income Security Act <b>IMMIGRATION</b> <input type="checkbox"/> 462 Naturalization Application <input type="checkbox"/> 465 Other Immigration Actions	<input type="checkbox"/> 422 Appeal 28 USC 158 <input type="checkbox"/> 423 Withdrawal 28 USC 157 <b>PROPERTY RIGHTS</b> <input type="checkbox"/> 820 Copyrights <input type="checkbox"/> 830 Patent <input type="checkbox"/> 840 Trademark <b>SOCIAL SECURITY</b> <input type="checkbox"/> 861 HIA (1395ff) <input type="checkbox"/> 862 Black Lung (923) <input type="checkbox"/> 863 DIWC/DIWW (405(g)) <input type="checkbox"/> 864 SSID Title XVI <input type="checkbox"/> 865 RSI (405(g)) <b>FEDERAL TAX SUITS</b> <input type="checkbox"/> 870 Taxes (U.S. Plaintiff or Defendant) <input type="checkbox"/> 871 IRS—Third Party 26 USC 7609	<input type="checkbox"/> 375 False Claims Act <input type="checkbox"/> 400 State Reapportionment <input type="checkbox"/> 410 Antitrust <input type="checkbox"/> 430 Banks and Banking <input type="checkbox"/> 450 Commerce <input type="checkbox"/> 460 Deportation <input type="checkbox"/> 470 Racketeer Influenced and Corrupt Organizations <input type="checkbox"/> 480 Consumer Credit <input type="checkbox"/> 490 Cable/Sat TV <input type="checkbox"/> 850 Securities/Commodities/Exchange <input type="checkbox"/> 890 Other Statutory Actions <input type="checkbox"/> 891 Agricultural Acts <input type="checkbox"/> 893 Environmental Matters <input type="checkbox"/> 895 Freedom of Information Act <input type="checkbox"/> 896 Arbitration <input type="checkbox"/> 899 Administrative Procedure Act/Review or Appeal of Agency Decision <input type="checkbox"/> 950 Constitutionality of State Statutes
<b>REAL PROPERTY</b> <input type="checkbox"/> 210 Land Condemnation <input type="checkbox"/> 220 Foreclosure <input type="checkbox"/> 230 Rent Lease & Ejectment <input checked="" type="checkbox"/> 240 Torts to Land <input type="checkbox"/> 245 Tort Product Liability <input type="checkbox"/> 290 All Other Real Property	<b>CIVIL RIGHTS</b> <input type="checkbox"/> 440 Other Civil Rights <input type="checkbox"/> 441 Voting <input type="checkbox"/> 442 Employment <input type="checkbox"/> 443 Housing/Accommodations <input type="checkbox"/> 445 Amer. w/Disabilities - Employment <input type="checkbox"/> 446 Amer. w/Disabilities - Other <input type="checkbox"/> 448 Education	<b>PRISONER PETITIONS</b> <input type="checkbox"/> Habeas Corpus: <input type="checkbox"/> 463 Alien Detainee <input type="checkbox"/> 510 Motions to Vacate Sentence <input type="checkbox"/> 530 General <input type="checkbox"/> 535 Death Penalty <b>Other:</b> <input type="checkbox"/> 540 Mandamus & Other <input type="checkbox"/> 550 Civil Rights <input type="checkbox"/> 555 Prison Condition <input type="checkbox"/> 560 Civil Detainee - Conditions of Confinement			

**V. ORIGIN** (Place an "X" in One Box Only)

- ☒ 1 Original Proceeding
- ☐ 2 Removed from State Court
- ☐ 3 Remanded from Appellate Court
- ☐ 4 Reinstated or Reopened
- ☐ 5 Transferred from Another District (specify)
- ☐ 6 Multidistrict Litigation

**VI. CAUSE OF ACTION**

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity):  
Federal Tort Claims Act; 28 U.S.C. 1346(B) & 28 U.S.C. 2671, et. seq.

Brief description of cause:

Trespass, nuisance, and negligence by the U.S. on Plaintiff's land located on Ft. Belknap Indian Reservation

**VII. REQUESTED IN COMPLAINT:**

☐ CHECK IF THIS IS A CLASS ACTION UNDER RULE 23, F.R.Cv.P.

DEMAND \$  
5,349,744.00

CHECK YES only if demanded in complaint:  
JURY DEMAND: ☐ Yes ☒ No

**VIII. RELATED CASE(S) IF ANY**

(See instructions):

JUDGE

DOCKET NUMBER

DATE  
03/20/2015

SIGNATURE OF ATTORNEY OF RECORD

FOR OFFICE USE ONLY

RECEIPT # \_\_\_\_\_ AMOUNT \_\_\_\_\_ APPLYING IFP \_\_\_\_\_ JUDGE \_\_\_\_\_ MAG. JUDGE \_\_\_\_\_

## APPENDIX B

**MATT PROPERTY RECLAMATION PLAN**  
**COST ESTIMATE REPORT**  
**BLAINE COUNTY, MONTANA**



Prepared For  
**Baldwin Crocker & Rudd**  
PO Box 1229  
Lander WY, 82520

Prepared By



P. O. Box 8578, 140 E. Broadway, Suite 23, Jackson, Wyoming 83002

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**September 30, 2015**

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Project Background.....	1
Proposed Project .....	3
Agricultural Land Reclamation.....	4
Incised Eroding Channel Reclamation.....	4
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Summary and Conclusions .....	6
Attachments .....	7

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Figure 2. Time series aerial photography depicting road maintenance and channel confinement on the Matt property .....	3
Figure 2. Incised eroding stream channel, Matt property .....	4
Figure 3. Road relocation plan, Matt property .....	5

## **INTRODUCTION**

Biota Research and Consulting, Inc. (Biota) has been retained by Baldwin Crocker & Rudd P.C. to compile a cost estimate for the restoration of agricultural, forest, and riparian lands on the Matt property in Blaine County Montana. Past roadway construction and maintenance activities on the property resulted in the avulsion and capture of Whitehorse Canyon Creek within the road alignment, and the subsequent destruction of the property. This report outlines conceptual treatments and costs to repair damaged components of the property including the agricultural land, the incised eroding channel, the historic channel alignment, and the relocation of the roadway.

## **PROJECT AREA**

The Matt property is located in the Fort Belknap Reservation approximately 2.5 miles south of Lodgepole, in Blaine County Montana (attached Exhibit 1). The project area includes approximately 5,000 feet of Whitehorse Canyon Creek that was captured by the roadway and approximately 10 acres of agricultural lands, forested areas, and riparian lands were impacted by resultant erosion and sedimentation. The project is located in a Federal Environmental Management Agency (FEMA) flood Zone D, which is a flood hazard category assigned to sparsely populated areas that have possible but undetermined flood hazard.

## **PROJECT BACKGROUND**

The project reach of Whitehorse Canyon Creek is a perennial stream with a drainage area of approximately 4.2 square miles. Peak flows through the reach are typically associated with snowmelt runoff. Historic road construction and maintenance activities that occurred on the property resulted in the capture and confinement of stream flows along the road alignment, and the cessation of the natural flow regime within the historic channel of Whitehorse Canyon Creek. The ensuing hydraulic conditions and flow dynamics along the anthropogenically altered flow path resulted in severe channel degradation (down-cutting), mobilization of sediment, and deposition of alluvium in a downstream agricultural field. Sequential impacts to the creek and adjacent lands are depicted in time series aerial photography spanning from September of 2009 to November of 2011 (Figure 1). Existing impact types and areas are presented on the attached Exhibit 2.

The incised eroding channel has continued to mobilize sediment, and aerial photography from August 2013 depicts lateral migration that occurred as the confined channel eroded eastward through the adjacent roadway toward the historic channel alignment (Figure 2). Aerial photography from July of 2014 (Figure 2) depicts contemporaneous roadway construction work that enforced the confinement of the eroding channel and ensured isolation of the eroding channel alignment from the historic channel alignment.

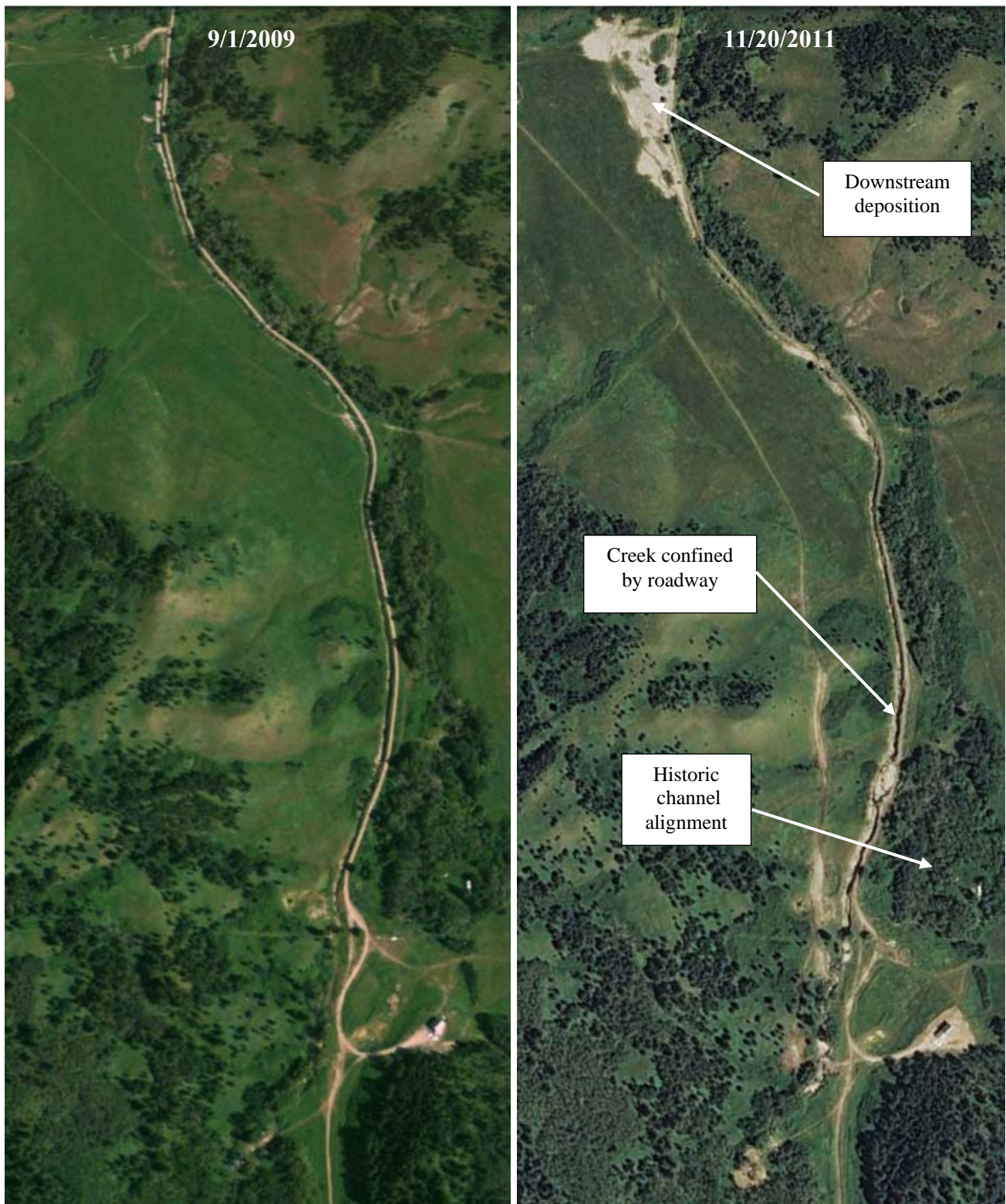


Figure 1. Time series aerial photography depicting site conditions on the Matt property.





Figure 2. Time series aerial photography depicting road maintenance and channel confinement on the Matt property.

### **PROPOSED PROJECT**

The reclamation of the Matt property is comprised of four components pertinent to the agricultural land, the incised eroding channel, the historic channel alignment, and the relocation of the road. The overall project concept is to remove the deposited sediment from the pasture, place suitable processed material to reclaim the eroded channel, return the creek to a restored historic channel alignment, and relocate a section of the gravel road to uplands on the property.

Topographic survey data collected in 2014 (attached Exhibit 3) were used in conjunction with aerial photography and site photos to generate conceptual reclamation plans (attached Exhibits 4 and 5). Treatment and materials costs were specified based upon past project experience and information obtained from multiple regional earthwork contractors. The estimated project implementation costs (attached Exhibit 6) are therefore based upon the best available site data, but treatment quantities and implementation fees could deviate from the estimate based upon continued site erosion and degradation.

## AGRICULTURAL LAND RECLAMATION

Material mobilized as a result of creek channel avulsion and incision were deposited in a downstream agricultural field in an approximately 7.75-acre area. The composition and depth of the deposited material varies, but the average depth of the material was estimated to be 1.5 feet for the purpose of developing treatment quantities and costs. The conceptual reclamation plan for the impacted agricultural land is to collect and stockpile the deposited material (estimated to be 18,750 cy). Similarly, material comprising the unsuitable road alignment would be removed and stockpiled. All salvaged and stockpiled material would subsequently be processed (screened) to separate rock and gravel from fine sediments and soils. The rock and gravel would be used as fill to reclaim the incised and eroding creek alignment. The fine sediments and soils would be used as fill or topsoil in specified locations. The impacted agricultural land would then be reclaimed through placement of an estimated 10,400 cy (8,400 Tons) of imported topsoil in a 10-inch thick cap layer. Drill seeding would then occur at a rate of 20 lbs/ac across the 7.75-acre treatment area and tree and shrub plantings would be installed on 12-ft centers across 0.64 acres to re-establish vegetative communities characteristic of the pre-disturbance condition.

## INCISED ERODING CHANNEL RECLAMATION

The road maintenance activities and associated direct channel modifications resulted in the avulsion of Whitehorse Canyon Creek and establishment of a new channel alignment located west of the roadway. The newly formed channel is incised by up to 13 feet (Figure 2) based upon available site survey data, and ongoing erosion has impacted an estimated 2.2 acres to date. The conceptual reclamation plan is to place a total of 23,800 cy (31,000 Tons) of fill in the incised degraded channel to restore pre-disturbance topographic conditions. This material could be comprised of suitable gravel and cobble recovered from the agricultural land impact area and from clean fill imported to the site, as necessary. An estimated 5,400 cy (4,400 Tons) of imported topsoil would then be placed across the disturbed area in an 18-inch thick cap layer. Drill seeding would occur at a rate of 20 lbs/ac across the 2.2-acre treatment area and tree and shrub plantings would be installed on 12-ft centers across 0.47 acres to re-establish vegetative communities characteristic of the pre-disturbance condition.



Figure 3. Incised eroding stream channel, Matt property.



## ROAD RELOCATION

The gravel roadway in the southern portion of the Matt property is located in the Whitehorse Canyon Creek riparian area and is expected to present a continued threat to the stability of the creek and the health and functionality of the property. In order to achieve site reclamation, the road would be relocated to a primarily upland alignment on the property (Figure 3). The proposed route is conceptual because topographic and soils data are not available from the proposed alignment, but the treatment would establish a 22-foot wide roadway through grubbing and grading of approximately 4,000 cy of existing material, placement of 3,800 cy (4,500 Tons) of base material to a 12-inch compacted depth, placement of 1,400 cy (1,600 Tons) of surface gravel to a 4-inch compacted depth, and installation of 6 culverts to accommodate drainage and runoff. The realigned road would be approximately 3,500 feet in length and encompass approximately 1.8 acres.

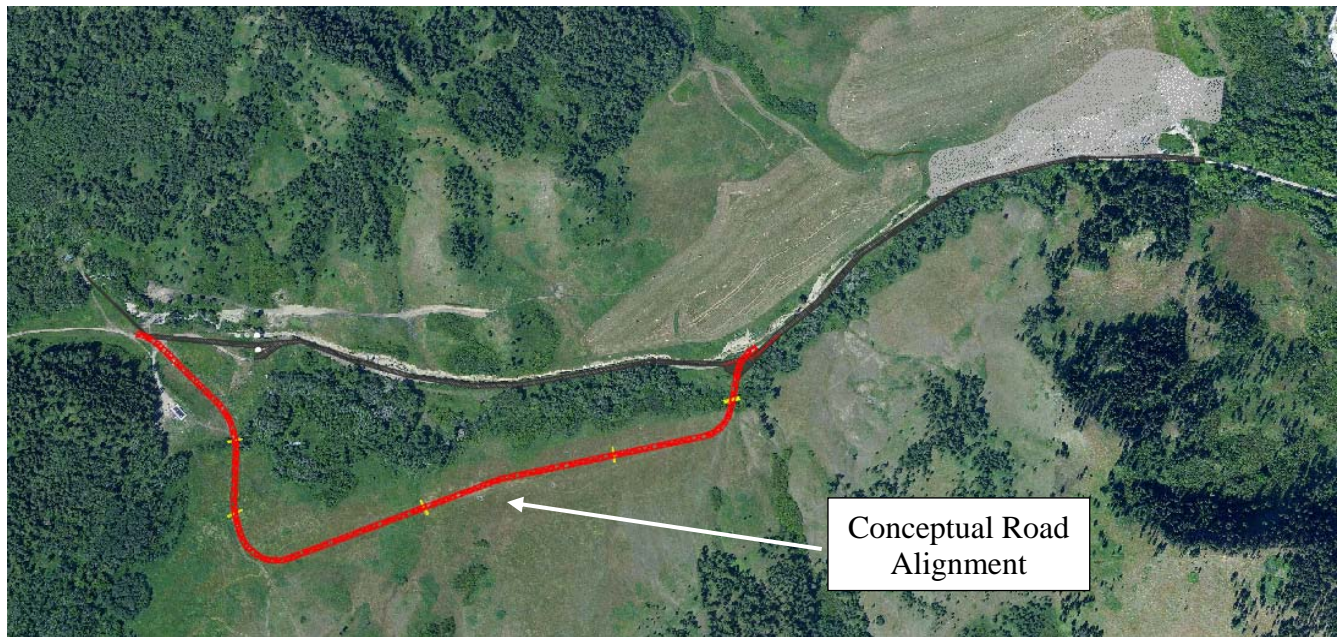


Figure 4. Road relocation plan, Matt property.

## HISTORIC CHANNEL RESTORATION

The conceptual site reclamation plan is to restore Whitehorse Canyon Creek to the historic channel alignment. The degradation and incision of the existing altered creek alignment occurred through the formation of head-cuts, or nick points, where locally steep gradient resulted in severe sediment entrainment and channel lowering. The upstream migration of those head-cuts has directly impacted an unknown length of Whitehorse Canyon Creek located upstream of the channel avulsion. Available survey data from 2014 indicate that the creek has been degraded as a result of the upstream migration of head-cuts throughout the 400 feet of channel located on the subject Matt parcel, and throughout another 1,850 feet of channel located on upstream lands owned by Matt. These degraded reaches of Whitehorse Canyon Creek located on the Matt property would be stabilized in profile and geometry through installation of instream treatments (rock cross vanes, bioengineered bank stabilization) designed to restore stream geomorphology. The effort would restore upstream impacted reaches of the creek and would deliver the watercourse to the natural downstream historic alignment. Existing conditions in the historic channel alignment are unknown. It is assumed that earthwork would not be required within the

historic channel alignment, and such activities are not included in the reclamation plan or construction cost estimate. Field investigation of the historic channel alignment should be completed prior to project completion to ensure that the historic channel is clear of debris and would function properly under the restored hydrologic regime.

## **PROJECT ADMINISTRATION**

The presented reclamation plan is conceptual in nature and should not be considered a final design. Additional field data, topographic surveys, and design efforts would be needed to develop final design specifications and construction plans. Reclamation treatments associated with wetlands or Waters of the United States could require authorization under Section 404 of the Clean Water Act. Construction administration and supervision would be required to ensure that reclamation treatments are implemented properly and in accordance with regulatory authorizations. Monitoring and adaptive management would be required to assess project success and identify post-construction maintenance requirements. Estimated costs associated with project implementation and oversight are presented in Figure 6, and a 20% contingency cost is added to the construction costs in an attempt to account for changes in site conditions that could have occurred since the collection of topographic survey data.

## **SUMMARY AND CONCLUSIONS**

The Matt property reclamation plan was developed based on the best available site and topographic data. Continued fluvial processes or direct land or roadway manipulations that have occurred since the collection of utilized site topographic data could result in an increase in the scope or scale of reclamation work required on the property. Plan details include treatments to reclaim impacted agricultural lands, return Whitehorse Canyon Creek to the historic channel alignment, relocate the roadway from riparian lands to uplands on the property, and restore reaches of Whitehorse Canyon Creek that were degraded as a result of road construction and maintenance activities. The total estimated project cost is \$2,930,113 and includes \$2,286,011 in project construction costs, a 20% cost of \$457,202 as a project contingency, and project design, oversight, and permitting costs of \$186,900.



## ATTACHMENTS

<b>Exhibit 1</b>	Title Sheet, matt Property reclamation Plan, Blaine County, Montana.
<b>Exhibit 2</b>	Impacted Area Plan, Matt Property Reclamation Plan, Blaine County, Montana.
<b>Exhibit 3</b>	Site Survey layout, Matt Property reclamation Plan, Blaine County, Montana.
<b>Exhibit 4</b>	Conceptual site Plan, Matt Property Reclamation Plan, Blaine County, Montana.
<b>Exhibit 5</b>	Typical Section, Matt Property Reclamation Plan, Blaine County, Montana.
<b>Exhibit 6</b>	Matt Property Reclamation Plan Implementation Cost Estimate.
<b>Addendum 1</b>	Headcut Stabilization Plan, Whitehorse Canyon Creek, Blaine County, Montana.
<b>Addendum 2</b>	Staff Resumes, Biota Research and Consulting, Inc.

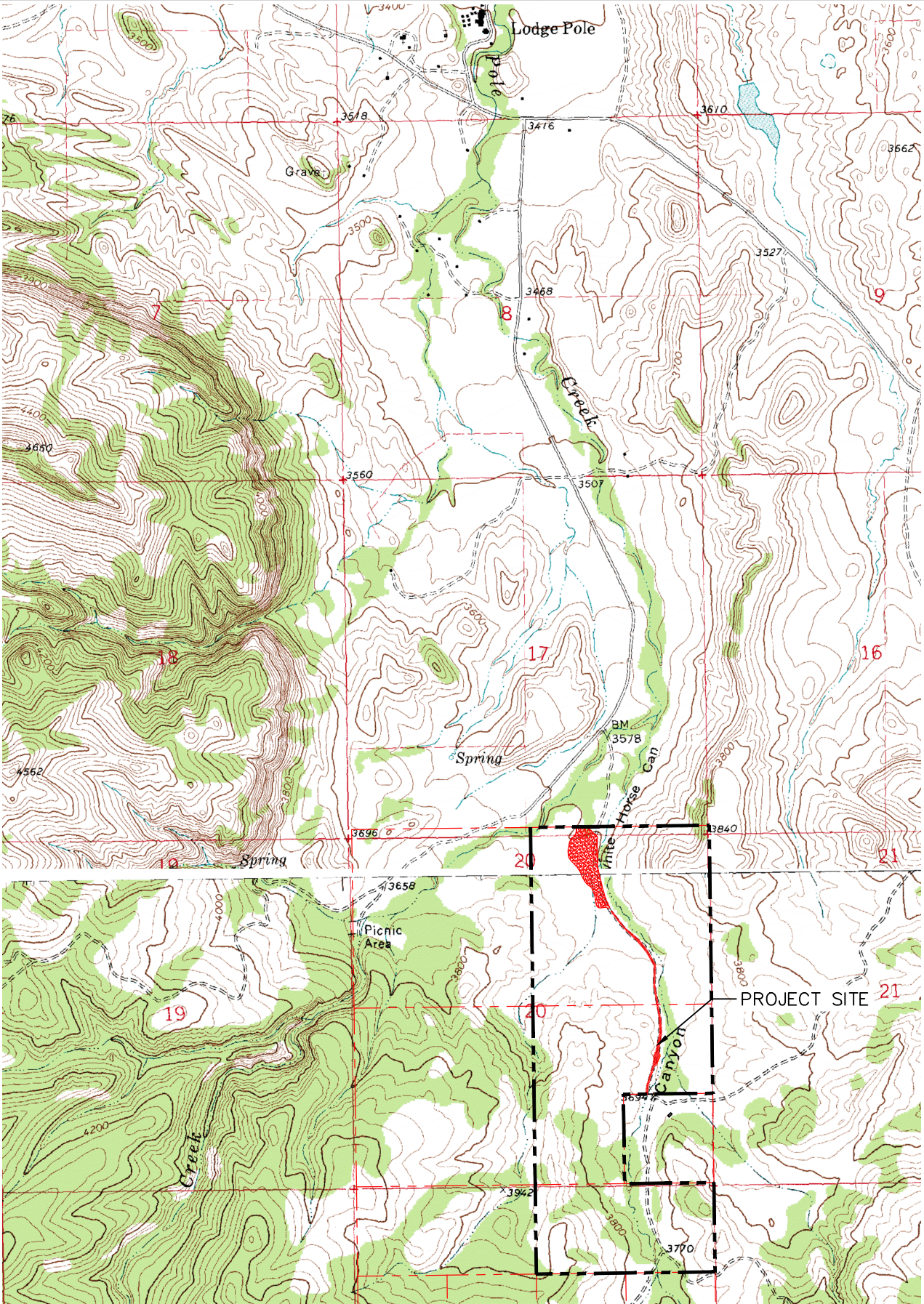
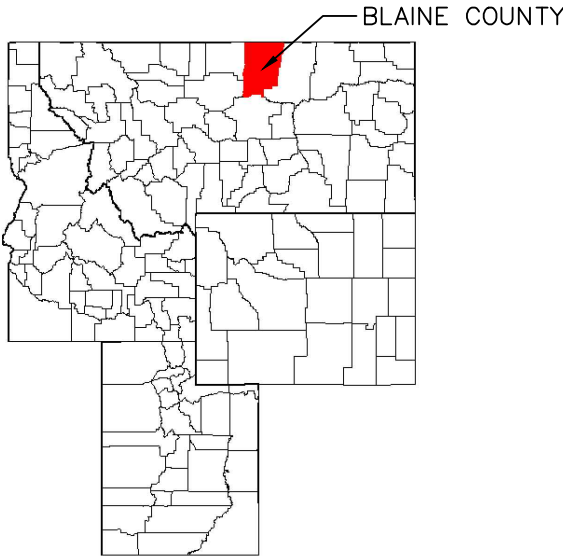


MATT PROPERTY  
RECLAMATION PLAN

PREPARED FOR  
Baldwin, Crocker, & Rudd  
Lander WY

DRAWING INDEX

- EXHIBIT 1 TITLE SHEET
- EXHIBIT 2 IMPACTED AREA PLAN
- EXHIBIT 3 SITE SURVEY LAYOUT
- EXHIBIT 4 CONCEPTUAL SITE PLAN
- EXHIBIT 5 TYPICAL SECTION



Project Vicinity Map  
Quadrangle: Zortman & Lodgepole, Montana  
Scale 1"=2000'



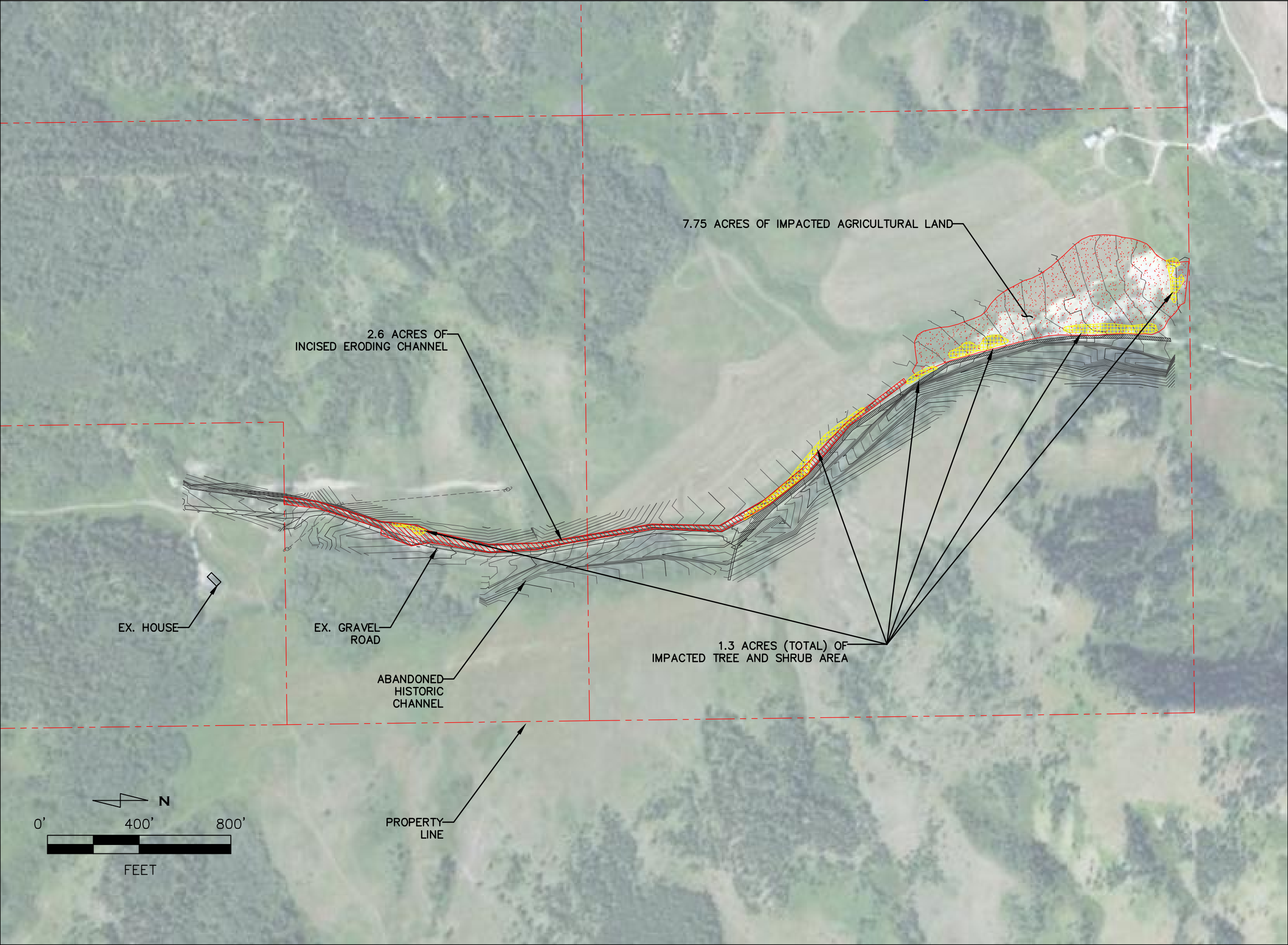
PO Box 8578, 140 E. Broadway, Suite 23  
Jackson, WY 83002, ph: 307-733-4216


TITLE SHEET  
MATT PROPERTY RECLAMATION PLAN  
BLAINE COUNTY, MONTANA  
PREPARED FOR  
BALDWIN CROCKER & RUDD

Date: 09/28/2015  
Description: CONCEPT  
Scale: AS SHOWN  
By:JTM

EXHIBIT 1







research & consulting inc.  
**Biota**

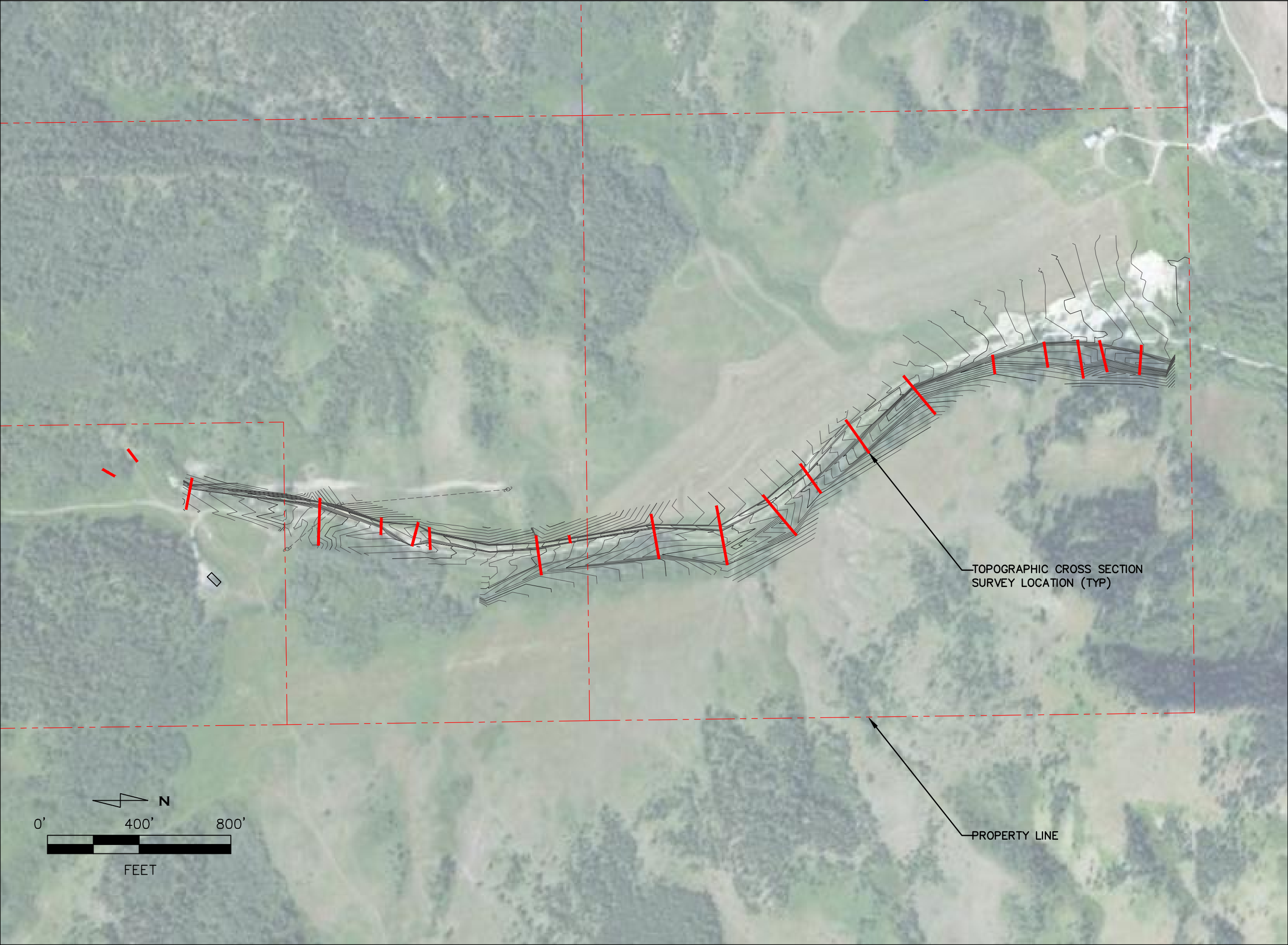
PO Box 8578, 140 E. Broadway, Suite 23  
Jackson, WY 83002, ph: 307-733-4216


IMPACTED AREA PLAN

MATT PROPERTY RECLAMATION PLAN  
BLAINE COUNTY, MONTANA  
PREPARED FOR  
BALDWIN CROCKER & RUDD

Date: 09/28/2015  
Description: CONCEPT  
Scale: AS SHOWN  
By:JTM

EXHIBIT 2





PO Box 8578, 140 E. Broadway, Suite 23  
Jackson, WY 83002; ph: 307-733-4216

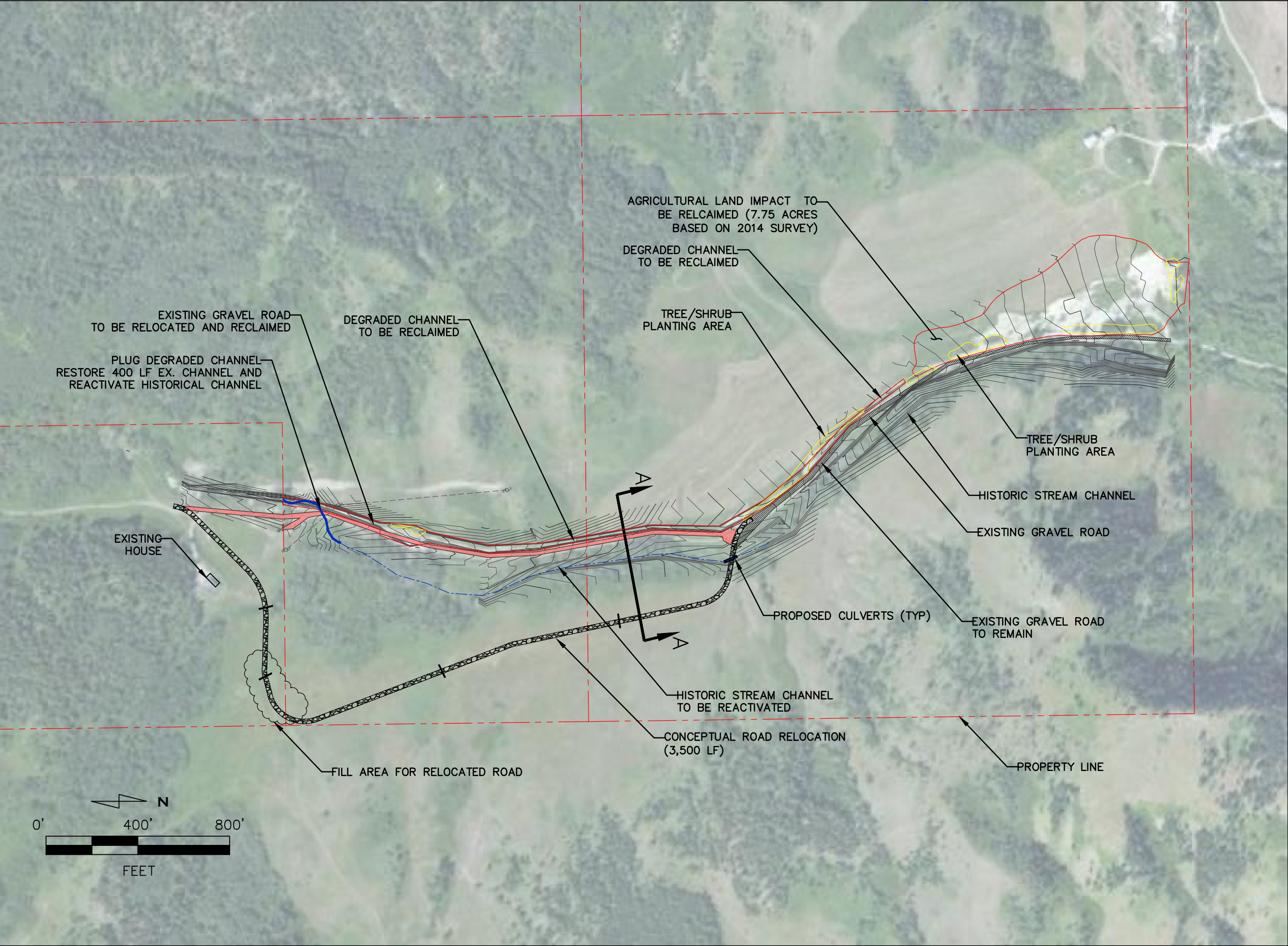
**SITE SURVEY LAYOUT**


MATT PROPERTY RECLAMATION PLAN  
BLAINE COUNTY, MONTANA  
PREPARED FOR  
BALDWIN CROCKER & RUDD

Date: 09/28/2015  
Description: CONCEPT  
Scale: AS SHOWN  
By:JTM

**EXHIBIT 3**







PO Box 8578, 140 E. Broadway, Suite 23  
Jackson, WY 83002, ph: 307-733-4216

CONCEPTUAL SITE PLAN

MATT PROPERTY RECLAMATION PLAN  
BLAINE COUNTY, MONTANA  
PREPARED FOR  
BALDWIN CROCKER & RUDD

Date: 09/28/2015  
Description: CONCEPT  
Scale: AS SHOWN  
By:JTM

EXHIBIT 4

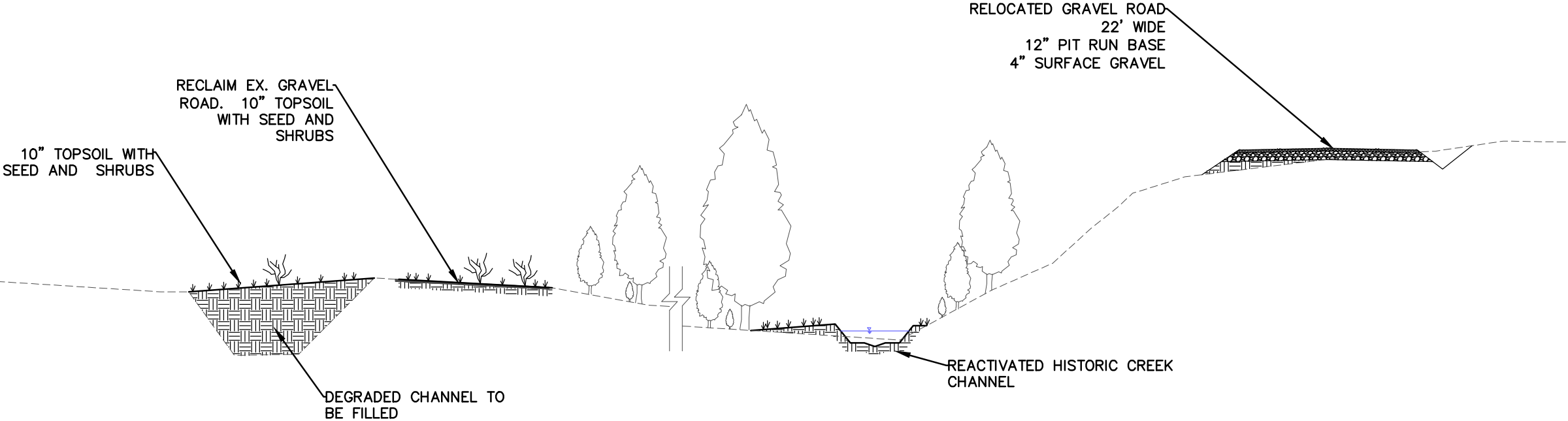


EXHIBIT 4 SECTION A-A  
(TYPICAL)



PO Box 8578, 140 E. Broadway, Suite 23  
Jackson, WY 83002, ph: 307-733-4216

TYPICAL SECTION

MATT PROPERTY RECLAMATION PLAN  
BLAINE COUNTY, MONTANA  
PREPARED FOR  
BALDWIN CROCKER & RUDD

Date: 09/28/2015  
Description: CONCEPT  
Scale: AS SHOWN  
By:JTM

EXHIBIT 5

Exhibit 6  
Matt Property Reclamation Plan  
Implementation Cost Estimate



Wednesday, September 30, 2015

ITEM	QUANTITY	UNIT	UNIT COST	TOTAL COST
Miscellaneous				
Mobilization and Demobilization	1	each	\$60,000	\$60,000
Subtotal				\$60,000
Agricultural Land Reclamation	7.75	acre		
Excavate Sediment (30 cy scraper-2 passes/hr)	18,750	cubic yard	\$6	\$112,500
Loader	160	hrs	\$200	\$32,000
Processing Plant	1	month	\$7,500	\$7,500
Topsoil (delivered)	8,400	tons	\$42	\$352,800
Spread & Grade Topsoil at 10-in Thickness	120	hrs	\$198	\$23,760
Drill Seeding, 20 lbs/acre	7.75	acre	\$350	\$2,713
Install 5-Gal Shrubs 12-ft Centers	100.00	ea	\$95	\$9,500
Install 5-Gal Trees12-ft Centers	95.00	ea	\$200	\$19,000
Subtotal				\$559,773
Degraded Channel Reclamation	2.22	acre		
Channel Fill - Misc Imported Material (delivered)	23,700	tons	\$32	\$758,400
Channel Fill - Salvaged/Screened Material (on-site)	7,300	tons	\$0	\$0
Backfill, compact degraded channel	340	hrs	\$200	\$68,000
Top Soil (delivered)	4,400	tons	\$42	\$184,800
Spread & Grade Topsoil at 18-in Thickness	65	hrs	\$198	\$12,870
Drill Seeding, 20 lbs/acre	2.22	acre	\$350	\$777
Install 5 Gal Shrubs 12-ft Centers	100.00	ea	\$95	\$9,500
Install 5-Gal Trees12-ft Centers	42.00	ea	\$200	\$8,400
Subtotal				\$1,042,747
Road Construction (Relocated Alignment)	3,500	linear feet		
Grub & Grade (blade)	4,000	cubic yard	\$40	\$160,000
Pit Run Subgrade Material (delivered)	4,500	tons	\$32	\$144,000
3/4" Gravel Surface (delivered)	1,600	tons	\$37	\$59,200
Grade & Compact Material (blade, rollers, water truck)	40	hrs	\$450	\$18,000
24" Culverts	4	each	\$5,000	\$20,000
48" Culverts	2	each	\$7,000	\$14,000
Reclaim Old Roadway- Topsoil (delievered)	1,256	tons	\$42	\$52,731
Reclaim Old Roadway- Spread & Grade Topsoil 10-in	21	hrs	\$198	\$4,158
Reclaim Old Roadway-Drill Seeding, 20 lbs/acre	1.15	acre	\$350	\$403
Subtotal				\$472,492
Creek Channel Restoration				
Plug & Reconstruct Channel, Connect to Historic Channel	400	linear feet	\$100	\$40,000
Reconstruct Channel on Upper Matt Property	1,850	linear feet	\$60	\$111,000
Subtotal				\$151,000
Construction Implementation Subtotal				\$2,286,011
Contingency (20% of Construction Cost)	20%			\$457,202
Project Design and Permitting				
Site Survey & Design	1	each	\$40,000	\$25,000
Site Reclamation Design & Oversight	1	each	\$14,400	\$14,400
Stream Channel Assesment	1	each	\$10,000	\$10,000
Stream Channel Design	1	each	\$25,000	\$25,000
Clean Water Act Permitting	1	each	\$10,000	\$10,000
Construction Supervision	1	each	\$20,000	\$20,000
Post-Construction Monitoring	5	year	\$6,500	\$32,500
Post Construcion Maintenance	5	year	\$10,000	\$50,000
Subtotal				\$186,900
Project Total				\$2,930,113

NOTICE:

The information contained hered was prepared in September 2015 and is based on information available at that time. Actual costs to complete proposed project activities may vary depending on changing conditions, availability of materials and workforce, and the unique needs of the client at the time of restoration and repair.

**ADDENDUM 1 - HEADCUT STABILIZATION PLAN**  
**WHITEHORSE CANYON CREEK**  
**BLAINE COUNTY, MONTANA**

**INTRODUCTION**

Anthropogenic manipulation of Whitehorse Canyon Creek resulted in the destabilization of the watercourse, and the channel correspondingly degraded (down-cut) and perpetuated severe bank erosion that impacted adjacent lands. The channel degradation subsequently propagated upstream beyond the location of the direct channel manipulations. The corresponding destabilization of upstream reaches could jeopardize the success of future downstream restoration efforts by increasing sediment supply and triggering channel aggradation, or by prompting avulsive channel realignments that could further degrade the Matt property project area.

The generalized project approach and cost estimate presented herein summarize the scope and scale of work that would be required to arrest the headcut and restore upstream channel degradation that has occurred as a result of anthropogenic system manipulations on the Matt property.

**PROJECT APPROACH**

The headcut in Whitehorse Canyon Creek that has migrated upstream from the Matt property has dispersed spatially into multiple 'nick points' that are each characterized by locally steep gradient and excess hydraulic force that perpetuates channel lowering. Channel survey data from the upper reaches of the creek are not available, but analysis of available aerial photography suggests that upstream channel degradation extends at least 3,160 ft to the road culvert crossing of the creek. The reach of channel is degraded (lowered), incised (confined), and enlarged. Morphologic stabilization of the reach could be accomplished through installation of grade control structures and reconstruction of stable channel geometry (cross sectional dimensions).

Grade control structures could include rock cross vanes or hardened riffle structures that are composed of material that would be immobile under restored channel hydraulic conditions. Hardened structures should be located regularly along the reach, but the drop in water surface elevation across any single structure should not exceed  $\frac{3}{4}$  ft in order to enable fish passage and achieve functional hydraulic conditions. Channel reaches located between hardened grade control structures should be reconstructed to achieve width and slope that ensures continuity in sediment transport capacity (the volume of material transported) and competence (the size classes of the material transported) under the expected hydrologic conditions. The reconstructed channel should incorporate multiple stages to promote proper fluvial function, including:

- 1) An inner berm channel to convey the mean annual discharge while consolidating late season low flows;
- 2) A bankfull channel to convey the bankfull discharge while maintaining stable hydraulic conditions and a bankfull stage equivalent to the floodplain elevation;
- 3) A floodplain channel to convey up to the 50-year flow event while maintaining low velocities, preventing erosion, and protecting riparian vegetation; and

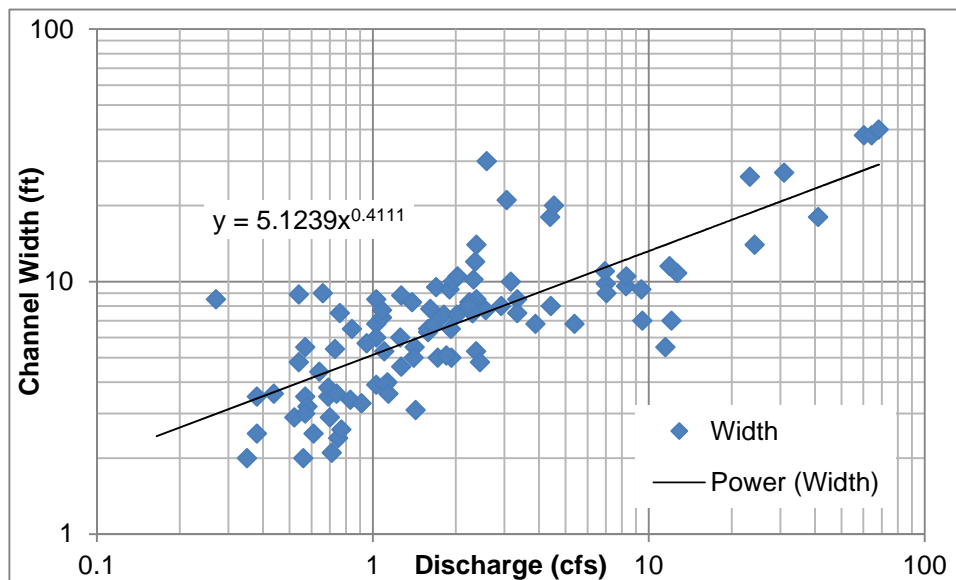


- 4) A terraced flood channel to convey the 100-year flow event while maintaining appropriate flow velocities and depths.

Bioengineering treatments including willow stingers and fascines, vegetative bundles, clump transplants, and pole plantings incorporated into the bank keys of all rock structures will help ensure the long-term stability of treatments. Bank toe wood protection is designed to accomplish bank stabilization, construction of design channel geometry and plan form, establishment of floodplain benches, and maintenance of channel layout. Wood revetment treatments are designed to protect vulnerable stream banks on the outside of meanders.

The presented approach to restoring the incised and eroding reach of Whitehorse Canyon Creek was recently applied in a similar setting in the Teton Mountain Range. Teton Creek was historically dredged, and resulting hydraulic conditions initiated a headcut that propagated upstream and resulted in channel degradation (lowering), incision, and enlargement. The restoration of 6,110 ft of Teton Creek (with design channel width of 51 ft) was completed for approximately \$2,600,000 and included installation of a series of hardened grade control structures and reconstruction of a multi-stage channel through the reach. This regional project example was used as a model with which to estimate costs associated with the Whitehorse Canyon Creek effort.

The US Geological Survey (USGS) maintains a stream gauging station in Lodge Pole Creek (#06154430) that is proximate to the Whitehorse Canyon Creek project area. Historic peak flow data and direct discharge field measurement data were obtained from the gauge period of record spanning 1987 to 1997. Statistical analysis of peak flow recurrence interval discharge rates indicates that the 1.4-year recurrence interval flow (a statistical estimation of the bankfull discharge) at the site is 36 cubic feet per second. Direct discharge measurement data obtained from the USGS were used to generate a power function correlation between discharge and channel width (Addendum Figure 1). The analysis indicates that Lodge Pole Creek has a channel width of 22 ft at the bankfull discharge.



Addendum Figure 1. Hydraulic relationship between channel width and discharge, USGS gauge site (#06154430) in Lodge Pole Creek.

The Whitehorse Canyon Creek project area has a catchment (drainage basin) of approximately 1/3 that of the USGS gauge site in Lodge Pole Creek. Therefore, it is estimated that the restoration of Whitehorse

Canyon Creek should achieve a bankfull channel width of about 1/3 that of Lodge Pole Creek, or about 7 ft.

The Teton Creek Restoration Project example presented herein was completed for a unit cost of \$425/ft, but the channel width (51 ft) was greater than that of Whitehorse Canyon Creek (7 ft). To scale project costs, the unit cost of the Teton Creek restoration project was multiplied by the ratio of relative widths of Teton Creek and Whitehorse Canyon Creek (51ft/7ft, or 14%). The estimated unit cost of headcut stabilization and restoration in Whitehorse Canyon Creek is therefore estimated to be \$60/ft. The estimated project length extending upstream to the road crossing culvert is 3,160 ft, so the estimated cost of restoration scaled from a regional example is \$189,600. A 20% contingency cost is added to the estimate to arrive at a reasonable estimate of project cost equal to \$227,520. This cost estimate was prepared in September 2015 and is based on the information available at that time. Actual costs of project activities may vary depending on site conditions, availability of materials and labor, and the needs of the landowner(s) at the time of restoration.

The construction of stable channel morphology in Whitehorse Canyon Creek, in conjunction with the installation of grade control structures, would accomplish project objectives of channel stability, sediment transport continuity, and fluvial system function. The project approach would create a self-maintaining channel that would convey sediment and hydrologic inputs without severe erosion or changes in channel form, and would increase the likelihood of success of downstream restoration efforts implemented on the Matt project.

**ADDENDUM 2 – STAFF RESUMES**  
**BIOTA RESEARCH AND CONSULTING, INC.**

**Thomas M. Campbell III**

**Resumé**

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**Title and Business Address**

President/Chief Environmental Consultant  
P.O. Box 8578, Jackson, Wyoming 83002-8578  
(307) 733-4216 (voice) (307) 733-1245 (fax)  
Email Address: tom@biotaresearch.com

**Education**

Texas Christian University, Fort Worth, Texas 1970-71  
Colorado State University, Fort Collins, Colorado 1971-74; B.S.; Wildlife and Fishery Biology  
Colorado State University, Fort Collins, Colorado 1977-79; M.S.; Wildlife and Fishery Biology

**Bio Sketch**

Mr. Campbell's position is chief environmental consultant and senior staff fishery biologist and aquatic ecologist. He has functioned as Project Manager on hundreds of fisheries and fluvial projects in the region. Mr. Campbell offers a wealth of experience and knowledge regarding passage, spawning, and seasonal habitat preferences of native fish species. He has over 35 years of experience constructing fish passage and enhancement projects in the region. Projects have involved designing and installing fish ladders, by-ways, plunge pool sequences, channel modifications to enable fish movement, treatments to increase refuge or cover, and riverine system restoration. Mr. Campbell also has extensive experience developing and implementing mitigation measures, environmental site and impact assessments, baseline ecological inventories, acquisition of environmental permits, compliance with Federal and State environmental regulations (NEPA and ESA), conducting wildlife inventories and impact assessments, providing expert testimony, developing and restoring wetlands and designing wetland mitigation projects, conducting scientific field research, and writing scientific papers and technical project reports.

Mr. Campbell has a long-term interest and experience in studying wildlife and habitat throughout the United States and excellent working relationships with the U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Bureau of Land Management, U.S. Army Corps of Engineers, and various state game and fish management agencies.

**Research**

<u>1975-1978</u>	Pine Marten Ecological Studies near Jackson, Wyoming.
<u>1979-1992</u>	Long-term mule deer winter ecology study near Jackson, Wyoming.
<u>1981-1986</u>	Pygmy rabbit distribution study in southwestern Wyoming.
<u>1981-1986</u>	Black-footed ferret conservation studies, Meeteetse, Wyoming.
<u>1989-1990</u>	Lower Gros Ventre River Instream Flow Study, Jackson Hole, Wyoming.

**Professional Affiliations and Certifications**

Teton County WY Conservation District  
Snake River Fund  
The Wildlife Society - Certified Professional Wildlife Biologist, 1985  
Ecological Society of America - Professional Ecologist, 1982  
American Fisheries Society  
American Society of Mammalogists  
Xi Sigma Pi Honorary Society  
Western Wetlands Development and Restoration Workshop

**Non-Profit Organizations**

Jackson Hole Wildlife Foundation – Emeritus Board Member  
Grand Teton National History Association - Past Board Director  
Trout Unlimited - Past Chapter President and Board Director  
The Wolf Fund - Past Board Director

**Ryan F Colyer**

**Resumé**

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**Title and Business Address**

Fluvial Morphologist/Fisheries Biologist  
P.O. Box 8578, Jackson, Wyoming 83002-8578  
(307) 733-4216 (voice) (307) 733-1245 (fax)  
Email: rcolyer@biotaresearch.com

**Education and Certifications**

Bachelor of Science, Biology: Ecology, Evolution, and Conservation, University of Washington. 1997-2000  
Post-baccalaureate Certificate in Geographic Information Systems (GIS), Pennsylvania State University, Nov 2006  
Certified Rosgen Level IV Fluvial Geomorphologist, Wildland Hydrology, Sept 2011  
Certified Fisheries Professional, American Fisheries Society, Feb 2010  
Certified Professional Ecologist, Ecological Society of America, June 2010  
Certified Technical Service Provider, Natural Resources Conservation Service, Aug 2007  
Streambank Soil Bioengineering Technical Training, Natural Resources Conservation Service, Oct 2009  
Stream Restoration and Geomorphology and Sediment Transport in Channel Design, Utah State University, Aug 2007  
River Analysis System (HEC-RAS) computer training course. American Society of Civil Engineers, Apr 2006  
Principles and Techniques of Electro-fishing courses. Smith-Root and USFWS training, Jun-Jul 2005  
Max Rollefson Award of Merit, Colorado-Wyoming Chapter American Fisheries Society, Feb 2013

**Bio-Sketch**

Mr. Colyer is an AFS Certified Fisheries Professional and a Rosgen Level IV certified fluvial morphologist who has worked for government, non-profit, and private sector entities to complete fisheries and fluvial projects on hundreds stream reaches throughout the Intermountain West. Mr. Colyer has also attended advanced education in fluvial geomorphology through Utah State University, and is familiar with the strengths and weaknesses inherent to both the Rosgen and anti-Rosgen approaches to river restoration. Mr. Colyer's experience includes running a basin-wide fish population investigation (using electro-fishing) and geomorphic channel classification project in all tributaries of the Upper Teton River Basin. He also has the ability to incorporate advanced fluvial geomorphic techniques from pro- and anti-Rosgen groups, NRCS, and USFS to complete comprehensive fisheries and fluvial projects involving fish passage, channel stabilization, sediment transport, hydraulic analysis, floodplain connectivity, flood hazard mitigation, wild fish spawning and utilization, and public infrastructure protection. Mr. Colyer has worked on large scale high profile projects in the Snake River, Green River, Portneuf River, Big Wood River, and Teton River basins. He has achieved project objectives of diverse interest groups including Trout Unlimited, Wyoming Game and Fish Department, Idaho Fish and Game, USFS, Friends of the Teton River, private land owners, and government entities including Teton County Engineering Departments in both Wyoming and Idaho.

**Publications and Presentations**

- 2012. Morphologically Based River Restoration: Methods, Accomplishments, and Regulatory Hurdles. Presentation at the Western Division American Fisheries Society Annual Meeting. Jackson, WY.
- 2010. Understanding Habitat Enhancement Potential of Degraded Spring Creek Systems. Presentation to the Spring Creek Workshop at the Idaho Chapter American Fisheries Society Annual Meeting. Pocatello, ID.
- 2007. Spring Creek Habitat Enhancement and Restoration Projects Result in Increased Utilization by Wild Snake River Fine-spotted Cutthroat Trout. Published in: Carline, R.F.; LoSapio, C., eds. 2007. Sustaining wild trout in a changing world; proceedings of Wild Trout IX symposium; 2007 October 9-12; West Yellowstone, MT. pg 110-115
- 2006. Upper Teton River Tributary Trout Population Assessment. Friends of the Teton River Final Report. [http://www.tetonwater.org/projects/TribAssessment/Teton%20Trib%20Report\\_longv.pdf](http://www.tetonwater.org/projects/TribAssessment/Teton%20Trib%20Report_longv.pdf) Driggs, ID.
- 2006. Modeled Hydrology Predicts Trout Species Composition of Upper Teton River Tributaries. Presentation to the Idaho Chapter American Fisheries Society Annual Meeting. Idaho Falls, ID.
- 2005. Watershed Status of Teton Basin Trout. Presentation to the Jackson Hole Wildlife Symposium, Teton Science School. Jackson, WY.
- 2005. Status of the Upper Teton River Tributary Trout Populations. Presentation to the US Fish and Wildlife Service during status review of Yellowstone cutthroat trout. Bozeman, MT.

**Jay T. Mazalewski, PE**

**Resumé**

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**Title and Business Address**

Professional Engineer  
P.O. Box 8578, Jackson, Wyoming 83002-8578  
(307) 733-4216 (voice) (307) 733-1245 (fax)  
Email: jmaz@biotaresearch.com

**Education**

University of Massachusetts, 1997, Bachelor of Science Civil Engineering  
Saint Anselm College, 1996, Bachelor of Arts Co-op Engineering/Liberal Studies

- Professional Engineer, Wyoming (14694), Idaho (P-13506), Montana (19507, lapsed, renewal pending), Massachusetts (46300)
- Region 6 Chair-Idaho Association of County Engineers and Road Supervisors
- City Council Member, Driggs, Idaho
- Advanced training and professional expertise in HEC-RAS, MS Project, AutoCAD, HydroCAD, HY-8

**Bio Sketch**

Mr. Mazalewski's diverse experience ranges from designing morphologic channel restoration to directing the public works department in Teton County, Idaho, with an annual budget of more than three million dollars. Jay's diverse experience has resulted in extensive technical expertise associated with fluvial condition assessment, river channel and topographic surveying, hydrologic investigations, application of hydraulic models to assess channel or structure function, alternative design development, final design advancement, engineering plan production, environmental permitting, construction staking and supervision, and project administration. Jay is currently a licensed engineer in both Idaho and Wyoming, and he brings robust interdisciplinary capabilities, project oversight, and public relations skills to the design and implementation of fisheries and fluvial improvement projects.

**Professional Experience**

2011-2014	County Engineer and Public Works Director, Teton County, Idaho Duties included management of the county Road and Bridge and Solid Waste Departments with an annual budget of \$3.4 million. Responsibilities included the planning, design, permitting, contracting, and construction oversight of all public works projects including flood hazard reduction, river stabilization and river restoration, improvement of river system and transportation system interfaces, and restoration of fluvial processes while protecting public infrastructure.
2006-2011	Civil Engineer, Project Manager, Harmony Design & Engineering, Inc. Duties included management of civil engineering projects in Idaho and Wyoming. Responsibilities included development of the civil engineering department inclusive of client relations, site assessment, design, implementation, and construction oversight.
2001-2006	Civil Engineer, Project Engineer, Nitsch Engineering Inc., Boston, MA Supervisor during all phases of design. Development of innovative solutions to surface water issues. Project management and relations with regional authorities including conservation commissions, town planning boards, and county planning agencies.
1999-2001	Civil Engineer, Project Designer Scott, Cox & Associates Inc., Boulder, CO Responsible for hydrologic studies, storm runoff designs, engineering plan production, construction surveying, and project implementation.
1998-1999	Civil Engineer, Project Engineer, R&R Engineers-Surveyors, Englewood, CO Responsibilities included design of water quality structures and erosion control measures.
1993-1997	Engineering Aide II, State of New Hampshire, Department of Fish and Game, Concord, NH Responsibilities included topographic surveys and field data collection, site layout and design, construction of riverine access, and erosion control.

**Kent B. Werlin**

**Resumé**

---

**Title and Business Address**

Wetland Scientist/Restoration Ecologist, Biota Research and Consulting, Inc.  
P.O. Box 8578, Jackson, Wyoming 83002-8578  
(307) 733-4216 (voice) (307) 733-1245 (fax)  
Email: kwerlin@biotaresearch.com

**Education**

South Dakota State University, Brookings, South Dakota 2002; M.S. Wildlife and Fisheries Sciences  
University of Colorado, Boulder, Colorado 1999; B.A. Environmental Studies  
Boston University – School for Field Studies, Atenas, Costa Rica 1998, Tropical Ecology

**Bio-Sketch**

Mr. Werlin is a Certified Professional Wetland Scientist with the Society of Wetland Scientists, and also has Rosgen training in fluvial geomorphology. Specializing in wetland and aquatic ecology, he has more than 12 years of experience conducting research, restoration, and rehabilitation of wetland/riparian ecosystems in the western United States. Mr. Werlin worked for the Nez Perce Tribe as a Fisheries Habitat Biologist for 5 years, where he focused on stream, wetland, and watershed restoration and protection to aid in the recovery of resident and anadromous salmonids in the Clearwater River basin of northern Idaho. He is an active member of the Society of Ecological Restoration and Ecological Society of America and the Society of Wetland Scientists. Additionally, Mr. Werlin has been certified as a Technical Service Provider for NRCS, and he has received advanced training in jurisdictional wetland delineation, wetland creation and restoration, revegetation design, bioengineering, hydric soils, fluvial geomorphology, NEPA/ESA compliance, and aquatic ecosystem monitoring/assessment. As the Wetland Scientist/Restoration Ecologist for Biota, Mr. Werlin conducts wetland delineations, ecological assessments, federal and state permitting, and the design and implementation of reclamation, revegetation, habitat enhancement, compensatory mitigation, and riparian/wetland restoration projects.

**Presentations and Publications**

- 2012 Off-Site Wetland Mitigation in the Tetons: A Case Example. Presentation given at the Society of Wetland Scientists – Northwest Chapter Annual Conference. Boise, ID. September 2012.
- 2005 Watershed Restoration in The Nez Perce Treaty Territory: A Holistic Approach. Paper presented at the 1<sup>st</sup> annual Inland Northwest Restoration Conference. Washington State Univ., Pullman, WA. September 2005.
- 2005 Linking Restoration with Education in the 21<sup>st</sup> Century. Poster presented at the Society of Ecological Restoration-Northwest Chapter's Annual Conference, Seattle, WA. April 4-8.
- 2002 A Floral Index of Biotic Integrity For Floodplain Wetlands. Paper presented at the 23<sup>rd</sup> annual Society of Wetland Scientists Conference, Lake Placid, New York. June 2-7.
- 2001 Floodplain Wetland Index of Biotic Integrity. Poster presented at the 63<sup>rd</sup> annual Midwest Fish and Wildlife Conference, Transitions in the Conservation Landscape, Des Moines, IA. Dec. 9-12.
- 2001 Floodplain Wetland Macrophyte Communities. Paper presented at the 5<sup>th</sup> annual Missouri River Natural Resources Conference, 2001: A Missouri River Odyssey, Great Falls, MT. June 24-27.
- Chipps, S. R., D. E. Hubbard, K. B. Werlin, N. J. Haugerud, K. A. Powell, J. Thompson, and T. Johnson. 2006. Association between wetland disturbance and biological attributes in floodplain wetlands. *Wetlands* 26:2, 497-508.
- Chipps, S. R., D. E. Hubbard, K. B. Werlin, N. J. Haugerud, and K. A. Powell. 2002. Development and application of biomonitoring indicators for floodplain wetlands of the Upper Missouri River basin, North Dakota. Final Report to the U.S. EPA, Office of Research and Development, Mid-Continent Ecology Division. Duluth, MN. 104 pp.
- Debates, T. J., S. R. Chipps, M. C. Ward, K. B. Werlin, and P. B. Lorenzen. 2003. Cladoceran zooplankton abundance under clear and snow-covered ice. *Journal of Freshwater Ecology* 18:169-171.
- Werlin, K. B. 2006. Protect and Restore the Lapwai and Big Canyon Creek Watersheds. Annual reports submitted to Bonneville Fish and Wildlife Program. Portland, OR.